Regional Landscape Review Of Climate Programs & Policies

A comprehensive inventory of climate related policies, programs and activities taking place in the Los Angeles region.

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A report for the Los Angeles Regional Collaborative for Climate Action and Sustainability

Table of Contents

Executive Summary

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«The farther back you can look, the farther forward you are likely to see.»

Winston Churchill

In begining to chart the path forward for the Los Angeles region to address climate change, the Los Angeles Regional Collaborative for Climate Action & Sustainability (LARC) commissioned this report to take a comprehensive look back at the extent of existing climate programs and to help guide LARC's early activities. To do this, this report provides a snapshot of both existing and emerging climate mitigation/adaptation programs within the region, as well as those programs outside the region that might impact or influence local climate policy and decision making.

The report's findings are extensive. At the federal level, the report found that while the federal government has begun to aggressively consider and evaluate a variety of different strategies and policies for regulating greenhouse gas emissions, these efforts are in their earliest stages, and regulatory schemes are still being crafted. As a result, it is an imperative that Los Angeles region climate policy makers track emerging federal legislation and regulations to keep their programs consistent with federal policy, and look for opportunities to leverage those policies to assist local efforts.

At the state level, California's Global Warming Solutions Act (AB 32) has been gently moving the entire state into a comprehensive climate change regulatory regime since its passage in 2006. Although progress on the bill has been steady, the rules and regulations being developed by the California Air Resources Board to meet the bill's goal of reducing California's greenhouse gas emissions to 1990 levels by 2020, will not be enforced until 2012. Meanwhile, it remains unclear how these regulations may change or how effective they may be will be in ther interim period before enforcement takes place. Another bill that has generated significant attention across the State is SB 375, which attempts to use innovative regional planning tacticts to achieve emission reductions through the reduction of vehicle miles traveled. Like AB 32, SB 375 implementation is in the very early stages and may remain subject to future modifications. Beyond these two bills, there are a myriad of other relevant state laws that have been passed over the past five years that take aggressive measures to reduce the states reliance on fossil fuels and greenhouse gas emissions.

To date, while many local entities and agencies have been establishing a variety of emission reduction programs, a comprehesive regional approach to addressing climate change does not exist. Instead, many worthy programs are underway, but few are regional in scope, resulting in a fragmented landscape. For example, the Los Angeles Department of Water and Power for example, is agressively targeting ClimateLA's renewable energy goal of 35 percent electricity from renewable sources, but the program only includes areas serviced by the utility and its partners. The County of Los Angeles has also been pushing forward on establishing a countywide energy efficiency and renewable energy loan program (authorized under AB 811), which will likely provide a significant boost to in-basin renewable energy generation once implemented, but its impacts on greenhouse gas emissions remains undetermined. In terms of planning, the Los Angeles County Metropolitan Transportation Authority, the Southern California Association of Governments, and the Council of Governments remain in the early stages of coordinating and working together in preparation for SB 375 implementation. And while some smaller jurisdictions, such as the cities of Santa Monica and Pasadena, have been even more agressive in pursuing climate programs, other similar sized jurisdictions have yet to even begin considering climate issues.

Although much has been accomplished, our investigation found that there remain critical gaps that should be addressed if the region intends to build a comprehensive regional approach to climate mitigation and adaptation. Furthermore, most local jurisdictions in the region have yet to engage in climate planning in any substantial way and are struggling to find the resources to do so. For those that have begun to act, the most difficult and resource-intensive steps still lie ahead. Finally, coordination between and amongst agencies and other entities (such as NGOs and advocacy organizations) on climate planning has been sparse or intermittent, and many key stakeholders lack the tools and best practice resources to even begin to take the first step forward. Considering this, our report concludes by laying out nine recommendations to on how they can begin to address these gaps, and help accelerate the climate planning throughout the region.

Introduction

Dealing with climate change on any scale is not a simple task. On the regional level in particular, effective climate change adaptation and mitigation programs require the difficult but necessary task of identifying and coordinating a number of interrelated political and structural bodies. Currently, local jurisdictions face difficult hurdles to regional cooperation, and the region itself faces additional hurdles such as a lack of federal leadership, a built-out and aging urban infrastructure, political division, poor agency coordination, and budgetary uncertainty.

Nonetheless, Southern California does have one valuable element driving climate action programs forward, an assortment of innovative and progressive policymakers supported by clear and apparent public support. According to a recent survey by the Public Policy Institute of California, approximately 80 percent of Los Angeles residents support government regulation of greenhouse gas emissions. This public support has been crucial to allowing policymakers to establish early action programs in the state and in the Los Angeles region, and it will continue to play a significant role in determining how more aggressive programs are designed and implemented in the future.

Public support alone, however, is not enough to get the job done in Southern California. The size, diversity, and physical geography of Los Angeles and the surrounding counties, combined with the difficulties described above, have produced a variety of local efforts with little oversight or monitoring and mixed results. Local governments and regional entities, whose relationships are intricately intertwined, are moving forward individually with relatively minimal coordination.

[Pull Quote Begin] The Los Angeles Regional Collaborative for Climate Action & Sustainability was designed to encourage greater coordination and cooperation at the local and regional levels. The Collaborative represents a network of leadership from government, the business community, academia, labor, and environmental and community groups. [End Pull Quote]

The Los Angeles Regional Collaborative on Climate Change and Sustainability (Collaborative) commissioned this Landscape Review to review and investigate some of the underlying difficulties in achieving regional cooperation with regard to decision making related to climate change. The Collaborative's goal is no easy task. The Los Angeles region is comprised of multiple layers of regional agencies such as SCAG, Metro, MWD, LADWP, and SCE to name a few. The region has intricate ties between at least five neighboring counties, which include hundreds of cities and a population of nearly 18 million. Still, this huge task should not be seen as a barrier to making a difference, but rather an opportunity to make a big difference, and an opportunity to make our communities safer, more sustainable, and more resilient. The time to act is now. The challenges ahead are significant, and in the face of tremendous obstacles, nothing less than great actions will make a difference.

This Landscape Review addresses some of the underlying challenges in achieving regional cooperation in the Los Angeles region. The study begins by aggregating the federal, state, and regional policy initiatives and programs related to climate change, and then investigates policy gaps, shortcomings, and opportunities for greater coordination and collaboration. The results of this study will be used to help set the Collaborative's agenda to support the implementation of coordinated and robust regional climate mitigation and adaptation programs.

Our inventory of climate action programs indicates that a tremendous amount of activity is taking place in the Los Angeles region. At the same time, our inventory also reveals that the climate action programs we identified are unevenly distributed around the region and remain in their earliest stages of implementation. Also, our review shows relatively little regional coordination or cohesion between the existing climate action programs.

As a result of this disparity in activity among cities in the region, and because we found relatively little regional coordination, a number of significant gaps are apparent. We identified numerous gaps that, if filled, may improve the overall quality of climate action programs among cities in the region. Furthermore, our review identified numerous gaps that, if filled, may improve the overall quality of climate action programs among cities in the region.We also present recommendations and potential opportunities available to fill these gaps. Pursuing all of the recommendations may not be necessary and they do not need to all occur simultaneously. By undertaking a few at a time, the

Collaborative can have a meaningful and positive impact on the region's ability to address climate change. With timely action, we believe that the next inventory of climate action activity in the region will demonstrate improvements from the current situation.

Federal Government: Climate Programs, Policies And Legislation

Federal rules and policies can have a tremendous impact on local planning for climate change. Currently, members of the U.S. House of Representatives and U.S. Senate have proposed competing bills that would establish an exclusive, nationwide cap-and-trade system. Beyond establishing a framework for a nationwide regulatory scheme for greenhouse gases, these bills and others would also provide local regions with large infusions of federal funds to plan for, monitor, and adapt to climate change. These funds would bolster funds distributed by the American Recovery and Reinvestment Act, which is already providing critical funding for investments in energy efficiency, renewable energy, and GHG mitigation. Finally, in addition to legislative direction, the U.S. EPA's rule-making authority may play a critical role in establishing how GHG regulations will be implemented at all levels of governance.

The American Clean Energy and Security Act of 2009

Congressman Henry Waxman (D-CA30) and Edward Markey (D-MA7) co-sponsored the American Clean Energy and Security Act of 2009 (H.R. 2454 or ACES), which was introduced on May 15, 2009. On May 21, 2009, the bill moved out of committee, and on June 26, 2009, it passed the House after two amendments.However, ACES remains to be passed by the Senate and signed into law by President Obama.

The most prominent regulatory feature of ACES is its proposed nationwide cap-and-trade system for regulating GHG emissions. In implementing this system, the bill would first amend the Clean Air Act to require the EPA to promulgate regulations to cap and reduce GHG emissions annually, so that GHG emissions from capped sources are reduced to 97 percent of 2005 levels by 2012, 83 percent by 2020, 58 percent by 2030, and 17 percent by 2050. Additionally, ACES would create incentives for large GHG emitters to achieve greater efficiency through offsets that could be exchanged and traded in a market for carbon credits.

Under the act, "covered entities" would include stationary sources (i.e., industrial sources) that emit more than 25,000 tons of GHGs per year, producers and importers of petroleum fuels (i.e., refineries), distributors of natural gas to residential, commercial and small industrial users (i.e., local gas distribution companies), and other specified sources. ACES will require electric utilities to meet 20 percent of their electricity demand through renewable energy sources and energy efficiency by 2020. The standards will apply to all utilities, including municipally owned utilities. ACES will also establish new standards for building efficiency, requiring newly constructed buildings to meet increasing targets for energy efficiency.

Furthermore, ACES will provide GHG emission allowances in order to: 1) offset the cost impact to consumers and workers; 2) aid businesses in transitioning to clean energy technologies; 3) support technology development and deployment; and 3) support activities aimed at building communities that are more resilient to climate change. Under EPA estimates of allowance prices, ACES will invest roughly $190 billion in clean energy programs through 2025. These programs include: $90 billion in energy efficiency and renewable energy investments by 2025, $60 billion for carbon capture and sequestration, $20 billion for electric and advanced technology vehicles, and $20 billion for scientific research and development. Many of the specific details of the bill are subject to amendment during the legislative process. However, it is important to note that, currently, ACES would preempt local and regional cap-and-trade programs. ACES would impose a moratorium on the implementation of state and regional cap-and-trade program beginning in 2012 and lasting until 2017. The act would also preempt state energy standards for appliances, standards for energy efficiency of outdoor lighting, and laws relating to the production and import of hydrofluorocarbons (HFCs). States, however, would retain the authority to set caps that lower GHG emissions at a faster pace than the federal targets.

The following programs proposed by ACES may affect local and regional climate planning:

- Green Jobs Program
- Rebates for low-and-moderate income consumers who may be disproportionately affected by increases in energy costs

- Electricity Rate Reductions, to subsidize residential utility rate-payers up to 75 percent for energy costs
- Renewable Energy and Energy Efficiency Investments
- Clean Transportation Investments
- Domestic Adaptation Funds
- Market Stability Reserve, to prevent price shocks that may result from potential shortages and market irregularities during the purchase of offsets and trading of carbon credits
- Allowances for Trade-Exposed Energy Intensive Industries, to subsidize energy intensive industries and to prevent migration of those industries to unregulated countries.
- Specific Allowances for Oil Refineries, Coal Plant Operators, and Carbon Capture and Sequestration Plants, to mitigate the immediate impact of cap-and-trade regulation.

The Clean Energy Jobs and American Power Act of 2009

Senators John Kerry (D-MA), Barbara Boxer (D-CA), and Paul Kirk (D-MA) introduced the Clean Energy Jobs and American Power Act of 2009 (S. 1733) as a counterpart bill to H.R. 2454 on September 30, 2009. S. 1733 was reported out of committee on November 5, 2009 and the bill awaits a full Senate vote. If the Senate passes S. 1733, the House and Senate will then engage in a conference committee to merge H.R. 2454 and S. 1733 into one bill, which will then be presented to President Obama to sign and enact into law.

Although they arose from different houses of congress, ACES and S. 1733 have many similarities. Overall, both bills cover the same sources of GHG emissions; both bills allocate two billion tons of yearly carbon offsets, while allowing for unlimited banking of carbon credit allowances; both bills provide rebates for offsets and allowances (to address concerns over industry competitiveness and to protect consumer price shocks); both bills establish a de facto tariff to avoid migration of GHG-intensive industries to unregulated countries, and most importantly, both bills preempt local and regional cap-and-trade for at least 5 years, from 2012 to 2017. Both bills are also subject to considerable amendment throughout the legislative process.

While the bills share many substantive similarities, S. 1733 contains notable deviations from H.R. 2454. For example, S. 1733 initially places a more stringent cap on emissions, although both bills ultimately target the same reduction in GHG emissions by year 2050. Furthermore, for purposes of assessing the impact of federal cap-andtrade on local and regional planning, there exist several noteworthy differences. The first involves the limit of offsets that can come from domestic sources. H.R. 2454 limits domestic offset credits to one-half of all offsets, domestic and international; S. 1733 would increase domestic offsets to three-fourths of all offsets, allocating only one-fourth of the overall offset credits to international sources.

Another difference between the two bills is that the House and Senate bills authorize different agencies to implement their respective offset programs. S. 1733 would delegate authority over the domestic capand- trade program to the President and international program authority to the U.S. EPA. By delegating domestic authority to the President, cap-and-trade regulatory standards may be subject to greater political influence. Alternatively, H.R. 2454 would effectively create two offset programs: the Department of Agriculture would implement a domestic agriculture and forestry program, and the U.S. EPA would have primary authority over domestic projects and all international projects. Although federal agencies may also be subject to political interference and turnover, local regions could establish and maintain closer ties to specific lead agencies as they are identified. In addition, agencies such as the EPA may be petitioned to enforce mandatory rulemaking, whereas the President's authority may be more immune from legal action.

EPA Rulemaking Under the Clean Air Act

Endangerment Finding

On December 7, 2009, the EPA issued two distinct findings to regulate GHGs under the Clean Air Act. First, the EPA issued a final Endangerment Finding. Under the Endangerment Finding, the EPA found that the current and projected concentrations of six key GHGs (carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), hydrofluorocarbons (HFCs),

perfluorocarbons (PFCs), and sulfur hexafluoride (SF6)) threaten the public health and welfare of current and future generations. Second, the EPA issued a Cause or Contribute Finding. Under the Cause or Contribute Finding, the EPA found that combined emissions of GHGs from new motor vehicles threaten public health and welfare. These findings do not impose any requirements on industry or other entities. However, both findings serve as prerequisites to the EPA's proposed GHG emission standards for light-duty vehicles, which were jointly proposed by EPA and the Department of Transportation's National Highway Safety Administration (NHTSA).

[Begin Pull Quote] The EPA's rulemaking authority under the Clean Air Act is based on the landmark Supreme Court decision in Massachusetts v. EPA, which held that the EPA must regulate GHGs upon finding that GHGs endanger public health. However, it is unclear how the EPA's rulemaking would interact with the proposed cap-and-trade legislation because both S. 1733 and ACES repeal large portions of the Clean Air Act. [End Pull Quote]

CAFE Standards

On September 15, 2009 EPA and NHTSA proposed the first national program to dramatically reduce GHG emissions and improve fuel economy for new cars and trucks sold in the United States. The combined EPA and NHTSA standards would apply to passenger cars, light-duty trucks, and medium-duty passenger vehicles, covering model years 2012 through 2016. They require these vehicles to meet an estimated combined average emissions level of 250 grams of carbon dioxide per mile, equivalent to 35.5 miles per gallon (MPG) if the automobile industry were to meet this carbon dioxide level solely through fuel economy improvements. The proposed standards would cut carbon dioxide emissions by an estimated 950 million metric tons and 1.8 billion barrels of oil over the lifetime of the vehicles sold under the program.

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It is also important to recognize the role that California has played in promoting increased fuel efficiency standards. In December, 2005, the California Air Resources Board (CARB) applied to EPA for a waiver to implement the Pavley regulations. The Pavley regulations require automobile manufacturers to meet increasing fleet-wide emissions standards for GHGs, which would have resulted in a 30 percent reduction in GHG emissions through 2016. The Bush Administration delayed action on California's request for over two years, and finally denied the waiver request in 2008. On January 21, 2009, CARB requested that the EPA under the Obama Administration reconsider the previous waiver denial. On June 30, 2009, EPA granted the waiver request, which begins with motor vehicles in the 2009 model year. The EPA and NHTSA emissions standards roughly approximate the Pavley regulations, yet on a nationwide scale.

Voluntary GHG Reduction Programs

In addition to increasing federal regulation, many voluntary programs remain intact from the Bush Administration's policy of implementing non-binding GHG reduction measures. These programs include: Climate Leaders, Combined Heat and Power (CHP) Partnership, ENERGY STAR, EPA Office of Transportation and Air Quality Voluntary Programs, Green Power Partnership, High GWP Gas Voluntary Programs, Methane Voluntary Programs, WasteWise, and Voluntary Greenhouse Gas Reporting Program. These voluntary programs, such as the Voluntary Greenhouse Gas Reporting Program, may be subject to considerable revision or elimination if Congress passes cap-and-trade legislation. For more information, see:this article.

State Of California: Climate Programs, Policies And Legislation

The state of California continues to lead the nation in addressing climate change. In doing so, California has created innovative regulatory and incentive programs to motivate and guide local entities to act. AB 32, California's comprehensive global warming bill, is, quite simply, game changing legislation. It aims to reduce greenhouse gas emissions from every sector of the economy and every geographic corner of the state. SB 375, a complementary bill to AB 32, seeks to address the carbon footprint of the State's metropolitan areas.

The effects of AB 32 and SB 375 will be felt by every business and every government in the state. In Southern California, patterns of development, individual commuting routines, and energy and water delivery infrastructure will require broad policy strokes, bold action, and enormous investment to reach the targeted GHG emission reductions. This chapter identifies the critical pieces of legislation and key bureaucratic players at the state level that will significantly influence local action.

Legislation

AB 32, The Global Warming Solutions Act

The state of California's Global Warming Solutions Act of 2006 (AB 32) is a comprehensive climate change policy established to reduce the state's GHG emissions to 1990 levels by 2020. Ultimately, every regulation, incentive, and subsequent legislation pursuant to AB 32 will have a tremendous impact on local businesses, industries, and governmental entities. In terms of addressing climate change, AB 32 sets the foundation for an expansive mandate that will influence climate action planning throughout the state.

With that critical dynamic established, what follows is a description of the action items included in the AB 32 Scoping Plan that will have particular relevance to local climate action planning, policy, and programs.

Preliminary Actions Pursuant to AB 32

In December 2007, the California Air Resources Board (CARB) approved the 2020 emission limit of 427 million metric tons of carbon dioxide equivalent (MMTCO2e) of greenhouse gases. The 2020 GHG emission limit will require a reduction of 169 MMTCO2e. In December 2008, CARB adopted the AB 32 Scoping Plan. However, CARB is still developing the implementation process for many provisions within the Scoping Plan, which are slated to take effect on January 1, 2012. Also in December 2007, CARB adopted a mandatory reporting requirement for the largest industrial sources to report and verify their GHG emissions.

As of November 2009, CARB reported 97 percent compliance with its mandatory reporting requirements. In addition, CARB has finalized nine Discrete Early Actions, in addition to three other CARB regulations, which will account for 70 MMTCO2e in reduced greenhouse gases. The Early Action measures take effect on January 1, 2010. Thus, CARB has enacted regulations that should account for 40 percent of the targeted reductions to meet the 2020 GHG emission limit.

Local Action

Although AB 32 is heavily weighted to address specific industries, there are several provisions that have particular relevance to local governments and regional climateaction planning:

- The Local Government Operations Protocol will provide a uniform emissions accounting and reporting process for local governments around the state, in order to set the proper foundation for local governments to achieve their targeted reduction of 15 percent below current levels by 2020.
- Public owned utilities (or municipal utilities), such as LADWP, will be subject to the state's RPS. This is a significant shift from the state's previous RPS regulations, which exempted municipal utlities from the states mandated RPS requirements. In addition, the Scoping Plan contains energy efficiency sections that will require action from municipal utilities.
- The Scoping Plan calls for a 20 percent reduction in water use, which municipal utilities will also be required to meet.

Remaining Obstacles

Looming on the horizon is the adoption of a statewide cap-and-trade program, which CARB released as a preliminary draft for public comment in November of 2009. Cap-and-trade is the most controversial aspect of AB 32 and GHG mitigation schemes in general. Pursuant to AB 32, CARB must complete its rulemaking for fiscal mechanisms by January 1, 2011. Those rules, if completed, would go into effect on January 1, 2012. Industry and business groups have expressed strong concerns about the financial impact of a statewide cap-and-trade program.

[SIDEBAR: More on AB 32]
AB 32 is being closely watched and studied by the business sector, local governments, and environmental groups. For additional analysis on the bill, the following web sites may be helpful:

- AB 32 "Global Warming Solutions Act" Fact Sheet [http://www.arb.ca.gov/cc/factsheets/ab32factsheet.pdf]
- AB 32 "Global Warming Solutions Act" Text & Requirements [http://www.arb.ca.gov/cc/ab32/ab32.htm
- AB 32 "Global Warming Solutions Act" Scoping Plan [http://www.arb.ca.gov/cc/scopingplan/scopingplan.htm]
- California Air Resources Board's Climate Change Program [http://www.arb.ca.gov/cc/cc.htm]
- AB 32 Implementation Group http://www.ab32ig.com/
- Natural Resources Defense Council Report on AB 32 http://www.nrdc.org/globalwarming/ca/ab32.pdf
- League of California Cities - AB 32 Implementation Updates http://www.cacities.org/index.jsp?displaytype=11&zone=locc&section=issues⊂_sec=issues_housing&tert=&story=27630
- Pew Center - AB 32 Update http://www.pewclimate.org/what_s_being_done/in_the_states/ab32

AB 32 Timeline in Brief

- **By Jan 1, 2009:** CARB adopts plan indicating how emission reductions will be achieved from significant sources of GHGs via regulations, market mechanisms and other actions.
- **During 2009:** CARB staff drafts rule language to implement its plan and holds a series of public workshop on each measure (including market mechanisms).
- **By Jan 1, 2010:** Early Action measures take effect.
- **During 2010:** CARB conducts series of rulemakings, after workshops and public hearings, to adopt GHG regulations including rules governing market mechanisms.
- **By Jan 1, 2011:** CARB completes major rulemakings for reducing GHGs including market mechanisms. CARB may revise the rules and adopt new ones after 1/1/2011 in furtherance of the 2020 cap.
- **By Jan 1, 2012:** GHG rules and market mechanisms adopted by CARB take effect and are legally enforceable.
- **December 31, 2020:** Deadline for achieving 2020 GHG emissions cap.

SB 375

SB 375 represents a state-led attempt to reform local and regional land use and transportation planning processes. Recent studies indicate that the transportation sector accounts for 40 percent of California's GHG emissions. Across most of Southern California, sprawling development patterns have created inefficient reliance on single occupant vehicles. As a result, Southern Californians engage in much higher Vehicle Miles Traveled (VMT) than other urban forms where mass transit is more closely integrated into the urban design. SB 375 will attempt to create more efficient land use and transportation patterns so that better public transit options and high density housing along transit corridors will lead to shorter commutes and reduced VMT, with subsequent reductions in GHG emissions.

The bill seeks to achieve these goals through the following mechanisms:

- SB 375 requires metropolitan planning organizations (MPOs) to craft Sustainable Communities Strategies (SCS) or Alternative Planning Strategies (APS) in their Regional Transportation Plans (RTP).

- SB 375 requires that housing units allocated according to Regional Housing Needs Assessment and Housing Element processes be consistent with the development pattern included in the SCS/APS.

- SB 375 creates incentives at the local and regional level through CEQA exemptions for proposed plans that meet criteria pursuant to approved SCS/APS processes. SB 375 provides access to transportation funding incentives for participating MPOs.

Southern California's SB 375 implementation process is slightly different than the rest of the state due to special provisions made for the Southern California Association of Governments (SCAG) and its subregions. Unique to the SCAG region, SB 375 provides SCAG subregions with the option to either create their own SCS, or choose to be included in an SCS coordinated by SCAG. There are 14 Councils of Government (COGs) falling under SCAG jurisdiction. Each COG can voluntarily choose whether or not to participate in the

SCS/APS process or it can defer to SCAG as its representative MPO. SCAG's responsibilities under SB 375 are discussed further below.

SB 375 requires Metropolitan Planning Organizations to:

- Prepare a Sustainable Communities Strategy (SCS) as part of the 2012 Regional Transportation Plan (RTP). The SCS will meet a state-determined regional GHG emission reduction target, if it is feasible to do so.
- Prepare an Alternative Planning Strategy (APS) that is not part of the RTP if the SCS is unable to meet the regional target.
- Integrate the SCS into the region's planning processes, in particular assuring that the Regional Housing Needs Assessment (RHNA) is consistent with the SCS at the jurisdiction level.
- Specific to SCAG only, allow for subregional SCS/APS development.
- Develop a substantial public participation process involving all stakeholders.

Transit Funding

Although SB 375 has been promoted as a mechanism to tie state transportation funding decisions to local land use decisions, all it really does is mandate that the regional planning agencies make their funding decisions conform to their own Sustainable Communities Strategy. Meaning funding descisions, and funding discretion, remain with the board of the regional planning agencies, which are composed of elected local officials from the region.

Preliminary Actions

CARB appointed members to the Regional Targets Advisory Committee (RTAC) in January of 2009. The RTAC provided recommendations to CARB in September 2009. CARB must present reduction recommendations by September 2010 Remaining Obstacles SB 375 is subject to the same major structural issue as the RTP itself. Ultimately, the decisions at the regional level are made by MPO board members, who are local elected officials. Local elected officials sitting as regional planning board members have had trouble policing themselves in the past.

In addition, the most significant challenge facing SB 375 implementation is funding. Even before construction of any of the necessary projects, the regional and subregional agencies responsible for meeting the planning requirements of SB 375 face problems with regard to staffing. In effect, SB 375 mandates greater local and regional planning, but it does not provide state financial assistance. At a time when state offices and local agencies are reducing staff levels, the mandates of SB 375 will place additional burdens on regional and subregional entities.

Finally, the unique provisions for SCAG and the 14-member COGs have created challenges specific to Southern California. Helping the COGs to draft SCS/APS that are sufficient to meet the demands of CARB and making sure that the 14 plans make sense in the context of the other subregional and regional planning efforts presents a significant challenge for the COGs and SCAG. It is yet to be seen which COGs will choose to participate in the SCS/APS process; furthermore, managing the preferences of each COG, and filling the resulting gaps, presents an organizational challenge for SCAG. SCAG has released a document (http://www.scag.ca.gov/sb375/pdfs/SCS_CollaborativeProcess102709.pdf) that attempts to set the stage for collaboration prior to the commencement of the planning process.

SB575

SB 575 changes and clarifies a few specific provisions of SB 375. Specifically, SB 575 allows the deadline for rezoning under the RHNA to be extended by one year if the local government has completed its rezoning at densities sufficient to accommodate at least 75 percent of the "units" (as opposed to sites) for very low- and low-income housing. In addition, SB 575 provides that the internal consistency requirement does not affect transportation projects funded solely by a local sales tax measure if they were listed in a ballot measure prior to December 31, 2008. For Southern California cities, it is important to note that the internal consistency measure does not apply to Measure R funded projects, but it would apply to Measure M in Orange County and Measure I in San Bernardino County.

Proposition 84

The Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Act of 2006 (Prop 84), was passed by California voters in the November 2006 general election. Although Prop 84 primarily addresses water quality and the prevention of contamination, the initiative also provided $580 million to address climate

change. Specifically, Prop 84 initiated the creation of an Urban Forestry Program to be managed by the California Dept. of Forestry, a Strategic Growth Council Program managed by Secretary for Natural Resources, and a Sustainable Communities Grant Program managed by California State Parks. As of November 2009, approximately $256 million has been committed, leaving a remaining balance of approximately $324 million.

Prop 84 Bond climate change allocations (in approximate dollars, as of November 2009):

- Urban Forestry: $20 million ($90,000 balance uncommitted)
- Urban Greening: $70 million ($64 million balance uncommitted)
- Competitive Park Grants: $400 million ($185 million balance uncommitted)
- Planning Grants and planning incentives: $90 million ($75 million balance uncommitted)
- Total: $580 million allocated ($324,090,000 balance uncommitted)

Funding and appropriations for Urban Greening and Planning Grants may only be made upon enactment of implementing legislation. For example, in 2008, the legislature enacted SB 732, in part to implement portions of funding under the Urban Greening and Planning Grants allocations. Appropriations for Competitive Park Grants do not require implementing legislation. For current status of Prop 84 bond allocation, see this link (http://bondaccountability.resources.ca.gov/p84.aspx).

SB 732

In 2008, the legislature enacted SB 732 to implement the Strategic Growth Council (http://www.sgc.ca.gov/) (SGC), a cabinet-level council comprised of the heads of member state agencies, namely: Cal EPA; the Health and Human Services Agency; the Business, Transportation, and Housing Agency; Office of Planning and Research; the Natural Resources Agency, and a public member appointed by the governor. The bill requires the Strategic Growth Council to manage and award grants and loans to support the planning and development of sustainable communities, largely through blocks of funds made available through Prop 84.

SB 732 lays out a number of criteria for the SGC to consider when allocating Prop 84 funds. Among grants already awarded were the Modeling Incentives awards. The Strategic Growth Council recently released the final guidelines for the Prop 84 Urban Greening and Sustainable Communities Planning Grant programs in October 2009. These grants provide more than $60 million over two or three funding cycles, through Sustainable Communities Planning Grants that would be awarded to city, county, MPO, COG, RTPA, or joint powers authority, to support sustainable communities through general plan development and support of regional plans.

AB 210

AB 210 allows cities and counties to amend state green building standards if they find that the amendments are necessary because of local climatic, geological, or topographical conditions.

The California Department of Housing and Community Development, the Division of the State Architect, the Office of Statewide Health Planning and Development, and the Building Standards Commission (BSC) developed the first set of green building standards for California, which were adopted by BSC in July of 2008 and took effect August 1, 2009. While many of the standards established are voluntary, particularly nonresidential, those that are mandated have established a relatively moderate baseline. However, the agencies are working to develop more stringent and aggressive standards for 2010.

CEQA Amendments

The basic goal of the California Environmental Quality Act (CEQA) is to ensure that environmental impacts of proposed projects are evaluated, and that significant impacts to the environment are mitigated and disclosed to the public. For projects with significant environmental impacts, the agency must rely on an environmental impact report to evaluate and disclose the required mitigation measures. In the context of GHG emissions, substantial controversy surrounds the determination of a threshold of significance for GHG emissions. The determination of significance is made by the agency with primary jurisdiction over the project. Because of the global nature of climate change, most projects do not result in GHG emissions that are individually significant. However,

CEQA also requires consideration of whether impacts are cumulatively significant, and many projects may be subject to CEQA analysis with regard to cumulative contributions to climate change.

In 2007, the legislature enacted Senate Bill 97, which requires the Office of Planning and Research (OPR) to develop draft CEQA guidelines for the mitigation of GHG emissions. SB 97 required OPR to prepare, develop, and transmit the guidelines to the Natural Resources Agency on or before July 1, 2009. The Natural Resources Agency is charged with certifying and adopting the guidelines on or before January 1, 2010.

On December 31, 2009, the Natural Resources Agency officially completed their formal rulemaking process, and transmitted proposed CEQA guidelines to the Office of Administrative Law (OAL), which is allowed 30 working days to review the rulemaking file. After OAL completes its review, it must submit the file to the Secretary of State for inclusion in the California Code of Regulations, after which the rules will become effective in 30 days.

The final text of the CEQA Guidelines Amendments adopted by the Natural Resources Agency can be viewed here: http://ceres.ca.gov/ceqa/guidelines/

Other Recent California Climate Change Legislation

AB 1493 (Pavley)(vehicle emission standards)
http://www.leginfo.ca.gov/pub/01-02/bill/asm/ab_1451-1500/ab_1493_bill_20020722_chaptered.html

SB 1 (Murray)(Million solar roofs)
http://www.leginfo.ca.gov/pub/05-06/bill/sen/sb_0001-0050/sb_1_bill_20060821_chaptered.html

AB 892 (Furutani) (Good Movement Emission Reduction Program)
http://info.sen.ca.gov/pub/09-10/bill/asm/ab_0851-0900/ab_892_cfa_20090421_100904_asm_comm.html

SB 626 (Kehoe) (Alternative Vehicle Electrical Infrastructure)
http://info.sen.ca.gov/cgi-bin/postquery?bill_number=sb_626&sess=CUR&house=S&site=sen

SB 391 (Liu)(CA Transportation Plan)
http://info.sen.ca.gov/pub/09-10/bill/sen/sb_0351-0400/sb_391_cfa_20090417_093022_sen_comm.html

AB 920 (Huffman)(Solar and Wind Distributed Generation Net-Metering)
http://info.sen.ca.gov/pub/09-10/bill/asm/ab_0901-0950/ab_920_bill_20090226_introduced.html

SB 17 (Padilla)(Smart Grid Systems)
http://info.sen.ca.gov/cgi-bin/postquery?bill_number=sb_17&sess=CUR&house=B&site=sen

SB 32 (McLeod)(Renewable Electric Generation Facilities)
http://info.sen.ca.gov/cgi-bin/postquery?bill_number=sb_32&sess=CUR&house=S&site=sen

SB 412 (Kehoe)(Self-Generation Incentive program)
http://info.sen.ca.gov/cgi-bin/postquery?bill_number=sb_412&sess=CUR&house=S&site=se

AB 1601 (Lieu)(Drought Efficient Landscapes)
http://info.sen.ca.gov/pub/95-96/bill/asm/ab_1601-1650/ab_1601_cfa_950515_094028_asm_comm.html

AB 1007 (Pavley)(Alternative Fuels)
http://info.sen.ca.gov/pub/05-06/bill/asm/ab_1001-1050/ab_1007_cfa_20050903_100242_sen_floor.html

AB 1638 (GHG Performance Standard)
http://info.sen.ca.gov/pub/95-96/bill/asm/ab_1601-1650/ab_1638_cfa_950403_163956_asm_comm.html

AB 1451 (Leno)(Property Tax for solar units)
http://info.sen.ca.gov/pub/07-08/bill/asm/ab_1451-1500/ab_1451_cfa_20080623_163102_sen_comm.html

AB 2466 (Laird)(PG&E Feed-In tariff)
http://info.sen.ca.gov/pub/07-08/bill/asm/ab_2451-2500/ab_2466_cfa_20080404_110119_asm_comm.html

AB 2267 (Fuentes)(State GHG emissions reduction action)
http://info.sen.ca.gov/pub/07-08/bill/asm/ab_2251-2300/ab_2267_cfa_20080320_122814_asm_comm.html

SB 97 (GHG emissions and CEQA analysis)
http://www.leginfo.ca.gov/pub/07-08/bill/sen/sb_0051-0100/sb_97_bill_20070824_chaptered.html

Executive Order S-13-08
http://gov.ca.gov/executive-order/11036/

Executive Order S-01-07 (Low Carbon Fuel Standard)
http://gov.ca.gov/executive-order/5172/

MOU with U.S. Secretary of the Interior Ken Salazar(expedite renewable energy projects)
http://gov.ca.gov/press-release/13576/

SB X2 4 (Cogdill) (P3 for Transportation projects)
http://info.sen.ca.gov/pub/09-10/bill/sen/sb_0001-0050/sbx2_4_cfa_20090215_133546_asm_floor.html

State Agencies

Office of the Governor

The Office of the Governor has had tremendous influence in crafting and approving the policies (i.e., legislation and executive orders that are driving the regulations). Among the Office of the Governor's key climate action programs and activities:

- Signed AB 32 and all climate change legislation passed during two terms in office.
- Strategic Growth Plan: authorized $42 billion in general obligation bonds for education, housing, levee repair, flood control, parks, and transportation infrastructure.
- Executive Order S-21-09, directing the California Air Resources Board to adopt regulations increasing California's Renewable Portfolio Standard to 33 percent by 2020
- Executive Order S-13-08, directing the Natural Resources Agency to create climate change adaptation strategy.
- Executive Order S-01-07, directing creation of a Low Carbon Fuel Standard.
- Hosts and organized an annual Governors' Global Climate Summit in Los Angeles.

In addition to the power to lead and establish the programs such as those listed above, the Office of the Governor has the unique power to appoint and remove key members of influential state agencies falling under the executive branch. Furthermore, many of these agencies report to the Office of the Governor for a variety of purposes, including strategy, policy recommendations, and reporting updates.

Overall, and in contrast to other states around the U.S., the Office of the Governor under Governor Schwarzenegger leadership has been supportive of aggressive climate action planning and mitigation programs.

Executive Level Agencies

California Air Resources Board

The California Air Resources Board (CARB) is a component of the Cal EPA, and it is dedicated to research, regulation, enforcement, and education on air quality issues in the State. Further, as mandated under AB 32, CARB is authorized to regulate and enforce GHG emissions standards and regulations. In this regard, CARB will have the authority to implement mandatory practices and punish public and private entities that fail to conform to those standards. This powerful rulemaking and regulatory authority will have a significant impact on how local regulatory agencies implement and design local emission mitigation strategies. In moving forward with AB 32 implementation, CARB has already adopted the AB 32 Scoping Plan, GHG protocols, a mandatory reporting regulation, and preliminary draft regulations for a statewide cap-and-trade program, which CARB recently released for public comment.

Climate Action Team

The Climate Action Team (CAT) is comprised of state agencies and it is chaired by Cal EPA Secretary Linda Adams. The CAT focuses on implementation of AB 32, with lead groups providing regular updates to the CAT on the status of developmental measures. The Secretary of the Cal EPA coordinates with the following officials: the Secretary of the Business, Transportation and Housing Agency; the Secretary of the Department of Food and Agriculture; the Secretary of the Natural Resources Agency; the Chairperson of the Air Resources Board; the Chairperson of the Energy Commission; and the President of the Public Utilities Commission. The CAT's main responsibility is to report on the progress made toward meeting the statewide GHG targets. The first Climate Action Team Report to the governor and the Legislature was released in March 2006 and has been updated and issued every two years thereafter. These reports and others sponsored by the Climate Action Team can be found on the CAT Reports page.

Strategic Growth Council

The Strategic Growth Council (SCG) is a cabinet level council comprised of the heads of member state agencies, namely: Cal EPA; the Health and Human Services Agency; the Business, Transportation, and Housing Agency; Office of Planning and Research; the Natural Resources Agency, and a public member appointed by the governor. The bill requires the SGC to manage and award grants and loans to support the planning and development of sustainable communities, especially blocks of funds made available through Prop 84. Prop 84 grants made available through the SGC are currently some of the only state funding available for local agencies to plan the type of anti-sprawl development that will be required under SB 375. For more on Modeling Incentive grants, Planning grants, and Urban Greening grants, visit this article.

California Energy Commission

The California Energy Commission (CEC) is the state's primary energy policy and planning agency. The CEC falls under the jurisdiction of the Natural Resources Agency, which in turn is under the jurisdiction of the Office of the Governor. The CEC has been a key player in AB 32 implementation, holding a joint proceeding with the California Public Utilities Commission on AB 32 implementation in the electricity sector, which resulted in an influential joint recommendation to CARB in February 2008.

The CEC is conducting scientific research on climate change through the Public Interest Energy Research Program and the California Climate Change Center, and it is also developing a Climate Research, Development, Demonstration, and Deployment "Road Map" in conjunction with the California Air Resources Board and other state agencies. Furthermore, the CEC is working with the California Climate Action Registry and the Western Climate Initiative to develop emissions inventory and reporting protocols, which represents a critical early step in the development of a cap-and-trade program in California and other participating states.

To lay out statewide policy strategies, the CEC adopts an Integrated Energy Policy Report every two years and an update every other year. The CEC has already taken steps to make sustainability improvements in the built environment, through its role as a partner in the New Solar Homes Partnership (along with the Public Utilities Commission). The CEC also helped craft the State's 2008 Building Efficiency Standards. The CEC is also a member of the Climate Action Team.

The Governor's Office of Planning and Research

The Office of Planning and Research (OPR) assists the governor and the administration in planning, research, policy development, and legislative analysis, and it acts as the Governor's liaison with local government. Earlier this year OPR submitted to the Secretary for Natural Resources its proposed amendments to the state's CEQA Guidelines for GHG emissions. These proposed changes will play a significant role in shaping the future of how GHG emissions are considered in the environmental review process, and will likely create new litigation and impact the developments across the state.

> [Pull Quote] The OPR also maintains an ongoing list of local climate action and environmental programs being implemented by cities and counties across the state. The list lists California cities with comprehensive initiatives to address GHG emissions and green building programs. It also identifies programs and initiatives been led by cities in other states. The list can be accessed here. The OPR also prepares the state's Environmental Goals and Policy Report (EGPR) every four years. [End Pull Quote]

Natural Resources Agency

The Natural Resources Agency (NRA) is comprised of 25 departments, commissions, conservancies, and boards. It manages awide variety of issues pertaining to water, fish and game, forestry, parks, energy, minerals, and coastal and marine life. As part of the executive branch, the NRA's focuses on climate adaptation strategies for managing these resources, and in doing so it recently produced the California Climate Adaptation Strategy. This critical document marks the state's initial effort to prepare for and adapt to the predicted environmental impacts of climate change. The Natural Resources Agency also received recommended amendments to the CEQA Guidelines for GHG emissions from the Governor's Office of Planning and Research, as mentioned above. Public comments on the Natural Resources Agency's changes to the proposed

amendments closed in November 2009.

Business Transportation and Housing Agency

The Business, Transportation and Housing Agency includes 14 departments and several economic development programs and commissions, working on a variety of different issues such as transportation, public safety, affordable housing, tourism, and international trade. Some of the departments included in the BTH are the California Department of Transportation (Caltrans), the Department of Housing & Community Development,and the Department of Motor Vehicles.

Although the BTH does not have a strong focus on climate or environmental issues, it does have some responsibilities in managing and funding major transportation, infrastructure and goods movement programs which have significant environmental and climate impacts. BTH is also responsible for a sizable amount of state funding through Prop 1B for partnerships between the state and local agencies, Prop 1B funding for emission reduction in goods movement, and the transportation and housing portions of the Strategic Growth Plan. BTH also recently established the Public Infrastructure Advisory Commission to advance public-private partnerships on infrastructure financing and development.

California Building Standards Commission

The California Building Standards Commission's main responsibility is to administer California's building codes, and to adopt, approve, publish, and implement those codes and other standards. In August 2009, the Commission adopted a state Green Building Standards Code. In addition, the commission has partnered with the California Department of Housing and Community Development, the Division of the State Architect, and the Office of Statewide Health Planning and Development to develop new, more stringent, statewide green building standards in 2010.

Department of Food & Agriculture

The California Department of Food and Agriculture protects and promotes California's agriculture. Despite its responsibility for one of California's largest industries, and one which stands at the front line of climate change impacts, the Department of Food and Agriculture has made only very incremental moves toward addressing climate change, either for GHG emission reduction strategies or adaptation measures. The department's California Ag Vision initiative sets strategic goals for the statewide agriculture industry by 2030, but provisions dealing with climate change are vague and lack regulatory power.

Additional State Agencies

Attorney General's Office

Since the passage of AB 32, the Attorney's General Office (AG) has provided much cause for commentary on the proper mechanism for developing and enforcing emission reduction measures. The AG first made news following an October 23, 2006, comment letter to San Bernardino County that resulted in a precedent setting lawsuit against the county for failing to consider GHG emissions in the county's General Plan. The ruling extended GHG considerations to the authority of CEQA analysis. Since then, the AG has provided a number of resources for CEQA-related GHG emissions, including comment letters on regional planning documents filed under CEQA, a list of all CEQA-related GHG efforts by the AG, and other guidance under CEQA and general plans related to climate change.

State Lands Commission

The three-member State Lands Commission consists of the Lieutenant Governor, the State Controller, and the Director of Finance. The State Lands Commission manages and protects all land that the state has received from the federal government. These lands include the beds of all naturally navigable waterways, such as major rivers, streams and lakes, tide and submerged

lands in the Pacific Ocean, swamp and overflow lands, state school lands, and granted lands. The commission authorizes the use of public lands based upon environmental, health and safety, and public benefit considerations. Thus, the State Lands Commission will be integral in the development of renewable energy projects, such as LADWP's proposed Owens Valley solar project, and approval of projects at California's ports, such as the ports of Los Angeles, Long Beach, and Hueneme.

California Public Utilities Commission

The PUC is the only agency in the state charged with protecting private utility consumers. The PUC is technically a part of the executive branch, but it is not specifically under the jurisdiction of the governor. The PUC's environmental program is called Renewables, Energy, and the Environment. The PUC is also currently undergoing climate strategy work for the PUC's rulemaking on GHG policies, which is divided into two phases: 1) Implementation of a Greenhouse Gas Emissions Performance Standard and 2) Consideration of Greenhouse Gas Policies Under Assembly Bill 32, which is a joint proceeding with the California Energy Commission. The PUC provides a number of key incentives for the development of distributed power generation, including the California Solar Initiative (SB 1) and the Self Generation Incentive Program. The PUC's central role in reforming and regulating utilities—and the water and electricity supply controlled by the utilities—means that it will be one of the main policy players for the implementation of RPS standards and the potential statewide cap-and-trade program. The effectiveness through which the PUC will implement these critical policies will have tremendous impact on the success of AB 32 and California's fight against climate change.

California Transportation Commission/California Department of Transportation

The California Transportation Commission is responsible for programming and allocating funds for the construction of highways and passenger rail, as well as other transit improvements throughout California. The commission also advises and assists the Business, Transportation and Housing Agency and the Legislature in formulating and evaluating state policies and plans for California's transportation programs, including the process of securing state and federal funding for the state's transportation needs. Specific to climate change legislation, the Transportation Commission has produced a regional transportation planning assistance program in response to SB 375. SB 391 requires the California Department of Transportation to provide to the Transportation Commission and specified legislative committee chairs an interim report that reports on Sustainable Communities Strategies and alternative planning strategies pursuant to SB 375. The Department of Transportation, according to SB 391, must update the California Transportation Plan by December 31, 2015, and every five years thereafter. SB 391 requires the plan to address how the state will achieve maximum feasible emissions reductions in order to attain a statewide reduction of GHG emissions to 1990 levels by 2020 and 80 percent below 1990 levels by 2050.

Office of the Treasurer

The Treasurer's Office provides banking services for state government, setting goals to minimize interest and service costs and to maximize yield on investments. The treasurer is responsible for the custody of all monies and securities belonging to or held in trust by the state; investment of temporarily idle state monies; administration of the sale of state bonds, as well as bond redemption and interest payments; and payment of warrants drawn by the State Controller and other state agencies. The state treasurer chairs a number of boards, authorities, and commissions, many with ongoing funding programs for clean technology development and climate change mitigation programs (e.g., the California Alternative Energy and Advanced Transportation Financing Authority and the California Pollution Control Financing Authority).With the state in substantial debt and many of its programs and funding at risk, the ability of the Treasurer's Office to manage the state's debt will impact the state's ability to borrow, lend, and spend on sustainability programs and infrastructure in the future.

Greater Los Angeles Region*: Climate Programs & Policies*

On the regional level, multiple (and oftentimes overlapping) regulatory bodies and institutions are coordinating, managing and implementing various climate change initiatives. Three key entities are currently, or will soon be, playing decisive roles in the region: 1) the Southern California Air Quality and Management District, 2) the Southern California Association of Governments (and subregions), and 2) the County of Los Angeles. Other entities will play important coordination and implementation roles as well, as this chapter identifies below.

South Coast Air Quality Management District

The South Coast Air Quality Management District (SCAQMD) is the air pollution control agency for all of Orange County and the urban portions of Los Angeles, Riverside, and San Bernardino counties, an area containing nearly half of the entire population of California. It is governed by a 13 member Governing Board (three appointees and ten elected officials from the counties and cities of the South Coast Air Basin), and climate change programs are guided and informed by the SCAQMDs five member Climate Change Committee. The SCAQMD's main responsibilities have been to regulate emissions from stationary air pollution sources, and consumer products that have air quality impacts (paints, aerosols, etc). For climate purposes, the SCAQMD's major responsibilities in advancing and administering climate change programs are to administer the SoCal Climate Solutions Exchange and to develop CEQA guidance to local agencies on GHG significance thresholds.

Climate Programs & Initiatives

SoCal Climate Solutions Exchange
The SoCal Climate Solutions Exchange tracks and verifies pre-regulated voluntary GHG reduction efforts. SCAQMD staff tracks and verifies these reductions using CARB approved protocals, meaning that these reductions will be available to help the emitter meet its AB 32 reduction goals when the regulated reduction targets are implemented. The program is guided by the SoCal Climate Solutions Exchange Technical Advisory Group.

GHG CEQA Guidance
Local governments face heavy pressure to integrate climate change elements into their general plans, and also to adequately consider climate impacts when evaluating projects. In this regard, the SCAQMD and its GHG CEQA Significance Threshold Working Group will play an increasingly important role in providing guidance to local lead agencies for determining and applying GHG significance thresholds. In December 08, the SCAQMD Governing Board officially adopted an interim GHG significance threshold for lead agency projects, and it has since been working to develop GHG significance thresholds for commercial and residential projects. These thresholds however, will not have much value for CEQA guidance after the state CEQUA Guideline amendments for greenhouse gas emissions are officially adopted by the state in early 2010.

[SIDEBAR: Other Climate Related Programs at SCAQMD]

Technology Advancement Assistance:
SCAQMD oversees a program to co-sponsor public-private demonstration projects for lower-emission fuels, vehicles, and technologies for local fleets.

Tree Planting Partnership:
The SCAQMD established a funding match opportunity for cities and counties within SCAQMD's fourcounty jurisdiction. A total of $1.5 million will be available to co-sponsor tree planting projects.

Technology and Policy Forums:
The SCAQMD occasionally holds roundtable forums on clean-energy, climate change and air pollution topics and issues.

Southern California Association of Governments

The Southern California Association of Governments (SCAG) is the nation's largest metropolitan planning organization and council of governments, representing six counties, 189 cities, and almost 20 million residents. Its major responsibilities are to develop regional transportation plans and growth management strategies, and to provide regional data and analysis to CARB and the SCAQMD needed for California's State Implementation Plans as mandated by the Clean Air Act.

Climate Programs & Initiatives

SB 375 Implementation
SCAG's overarching climate related effort has been to meet the mandates set forth in SB 375, which directs SCAG to develop a Sustainable Communities Strategy (SCS) for the region. Alternatively, if the GHG emissions reduction targets cannot be met through the SCS, an Alternative Planning Strategy (APS) may be developed to show how those targets would be achieved through alternative development patterns, infrastructure, or additional transportation measures or policies.

Additionally, unique to the SCAG region, is the option for subregions to create their own SCS or APS. While this provides the subregions with greater flexibility, it also adds an additional politicized layer of decision making to the SB 375 process, which adds uncertainty to how the process will move forward on a regional basis. As it stands today, it is unclear how many subregions will choose to opt-in or opt-out of the SCAG SCS. To date (December 2009), six subregions have notified SCAG that they will opt-in to be a part of SCAG's collaborative SCS development process, and only one (Orange County COG) has officially accepted the delegation of authority. A full count is expected by the end of January 2010.

SCAG is moving forward with SB 375 implementation in four key ways:

1. SCAG is developing a framework and guidelines for the subregional SCS/ APS process.

2. SCAG is tracking and implementing the GHG target setting process, set forth by the Regional Targets Advisory Committee. Appointed on January 23, 2009, the Regional Targets Advisory Committee (RTAC) was created to provide recommendations on factors to be considered and methodologies to be used in the ARB target setting process for implementing SB 375.

3. SCAG is moving forward with an outreach effort to stakeholders, by holding a series of informational meetings and workshops to solicit input on SCAG's approach in addressing SB 375. SCAG is also meeting individually with subregions and cities to obtain input and share information on SB 375.

4. SCAG is developing complex planning and modeling programs required to measure the impact of land use and transportation strategies on regional vehicle miles traveled (VMT) and GHG emissions.

About the SCAG Subregions
As mentioned above, SB 375 provides the SCAG subregions with the unique opportunity to either create their own SCS, or choose to be included in an SCS coordinated by SCAG. While many subregions will likely make their decision January, some clues (political, organizational, and historical) exist that might show a proclivity to one option over the other. For example:

- **Gateway Cities Council of Governments–** The Gateway Cities COG has a long history of dealing with complex air quality and transportation issues, due to its proximity to the ports and the connecting transit corridors. In evaluating its options to opt-in or out of SCAG's SCS, the Gateway Cities COG recently completed a survey of the climate-related activities of its member cities. The survey showed that member cities are implementing a variety of programs, but without coordination.

- **South Bay Cities Council of Governments:** The South Bay Cities COG has an Integrated Land Use and Transportation Strategy, which could possibly serve as a basis for an SCS, nonetheless, there have been serious considerations within the COG about joining into the SCAG SCS.

- **San Gabriel Valley Council of Governments:** The San Gabriel Valley Council of Governments has a very active Energy, Environment, and Natural Resources

committee.

- **San Bernardino Associated Governments:** The San Bernardino Associated Governments has a comprehensive Long Range Transit Plan (LRTP) that establishes a vision for transit for the next 25 years. The LRTP prioritizes goals and projects for transit growth and connects land use and transportation strategies, and seeks to meet the legal mandates for planning and programming set by SB 375.

- **North Los Angeles County:** Although not confirmed, the county of Los Angeles has discussed an interest in preparing its own SCS for the unincorporated areas.

For a full list of SCAG subregions and links to their websites, see: http://www.scag.ca.gov/region.

[SIDEBAR: SCAG Region Requirements and Goals]

- Prepare framework and guidelines for subregional SCS/APS development
- Develop and implement a public participation and agency consultation process
- Hold workshops in each county within the region
- Prepare and circulate an SCS as part of a Regional Transportation Plan (RTP)
- If unable to meet GHG reduction targets with the SCS, develop a separate APS

SCAG SB 375 Implementation Timeline

Oct. '09: RTAC Report Released

Dec. '09: Subregions decide if they will draft individual SCS's (Delayed)

June '10: CARB issues draft regional targets.

Sep. '10: CARB issues final regional targets.

Nov. '11: SCAG releases a draft Regional Transportation Plan and Sustainable Communities Strategy for public review.

Apr. '12: Regional Council adopts Regional Transportation Plan and Sustainable Communities Strategy.

County of Los Angeles

The county of Los Angeles is the most populous county in the United States, home to 88 cities and approximately 10 million residents. The county is governed by a five-member Board of Supervisors, which is responsible for appointing nearly every department head except for the elected positions of County Assessor, District Attorney, and Sheriff. The main services provided by the county include law enforcement, property assessment, tax collection, protection of public health, social services, elections, and flood control. The county also has primary local jurisdiction over a large unincorporated area that includes more than 1 million residents in a 2,600 square mile area.

Climate Programs & Initiatives

Countywide Energy and Environmental Policy
The Countywide Energy and Environmental Policy was passed in January of 2007, and it provides the county with guidelines for building more robust energy conservation and environmental protection programs within the existing county departments. It also directs the county to track government related GHG emissions with the California Climate Action Registry, and to reduce its facilities' energy consumption by 20 percent by the year 2015. The policy consists of the following elements:

- Energy and Water Efficiency Program
- Environmental Stewardship Program
- Public Outreach and Education Program
- Sustainable Design Program

The policy also established an Energy and Environmental Team within the county's Internal Services Department, to assist with inter-departmental coordination on environmental issues and to develop ongoing program goals and objectives. The team meets bi-weekly, and it includes representatives from most of the major county departments as well as Southern California Edison, Southern California Gas Company, and LADWP. In December of 2009, the county formalized the Energy and Environmental Team into an Office of Sustainability, which continues to oversee the Energy and Environmental Policy.

Los Angeles County General Plan Update
In 2008, the Los Angeles County Department of Regional Planning completed a draft General Plan Update. Although, the update has a stronger focus on environmental issues, sustainable development, transit oriented development, and infrastructure maintenance and optimization, numerous concerns were voiced regarding the draft's climate change-related sections. As a result, the County put the EIR process on a 6-month hold in August 2009 to address these concerns and to make changes to the draft General Plan Update. During this period, the Department of Regional Planning is expected to review and amend the Update in conjunction with the County's SB 375 obligations, and to coordinate the General Plan with a forthcoming Climate Action Plan. Further, the six-month period should provide enough time to assure that the EIR for the General Plan Update is consistent with the proposed Greenhouse Gas CEQA Guidelines, which are expected to be adopted by the State pursuant to SB 97.

County of Los Angeles AB 811 Program
The County is in the process of establishing a countywide energy efficiency and renewable energy financing program pursuant to AB 811, which allows local governments to provide homeowners with low-interest loans for energy efficiency and clean energy upgrades on private property. The loans are then paid back to the local government through the owner's property tax. This program is particularly well suited to be managed on the county level, since the Los Angeles County Office of the Assessor already has property tax assessment and collection for all residents within the county.

All unincorporated county residents would qualify for this proposed program; residents in incorporated cities within the county will be able to use the program if the respective city government passes an authorizing resolution. Currently, the County is in the process of finalizing the program's design, conducting outreach to cities and COGs within the county, and securing ARRA funds from the federal government to finance the program. The program is currently expected to be operational by mid-2010.

Climate Planning & Emissions Inventory
While still in its early stages, the County of Los Angeles is in the process of developing a comprehensive climate action plan, a GHG emissions inventory, and a climate adaptation strategy. In May of 2008, the Los Angeles County Board of Supervisors instructed the Regional Director of Planning to determine how the county can begin to address climate action planning in three ways: (1) creating an inventory of the

county's operational and community-wide GHG emissions; (2) ensuring the draft General Plan considers the potential need to implement climate adaptation strategies; and, (3) and to assure that the draft General Plan is in accordance with other climate action policies, programs, and mandates. The response raised several concerns about implementing the above programs, and the county has since been working on addressing those concerns and securing funding for implementation.

Los Angeles County Metropolitan Transportation Authority

The Los Angeles County Metropolitan Transportation Agency (MTA) is governed by a 13 member Board of Directors, consisting of the mayor of Los Angeles, five county supervisors, three appointees by the mayor of Los Angeles, four city council members from various regional cities, and a non-voting California governor appointee. The agency is tasked with operating and maintaining one of the nation's largest public transportation systems, developing short and long range transportation plans and policies, and funding transportation projects and municipal bus operators.

Beyond maintaining and improving the existing transit infrastructure, the MTA is increasingly focused on diversifying the transportation system and providing for a broader range of travel modes. Further, the agency continues to deploy new transportation management strategies intended to maximize the efficiency and effectiveness of the transportation system for Los Angeles County, while also improving the quality of life in the region. Some of these strategies being implemented include upgrading information technologies (ex. signal synchronization, Regional Intelligent Transportation System), facilitating coordinated land-use and transportation planning (ex. transit-oriented development), and system pricing (ex. ExpressLanes pilot project). The MTA also plays an important facilitator role in the region. For example, for the last two years the MTA has hosted a Sustainability Summit providing opportunities for policy-level discussions among regional leaders on state climate change policy implementation, emerging technologies and sustainability.

Ad Hoc Sustainability Committee

In July 2007, the MTA established an Ad Hoc Sustainability Committee to provide leadership and policy direction on agency-wide sustainability policy, planning and programs. In January 2010, the Committee adopted a motion to expand its membership to include representatives from the major land-use planning authorities, including the directors of planning for LA City and LA County; SCAG's SB 375 planning director, and representatives from the subregions. The restructuring of the Committee, along with its renaming to the Ad Hoc Sustainability and SB 375 Implementation Committee, reflects the Committee's interest in playing a larger role in countywide coordination and implementation of SB 375.

SB 375 Implementation

The MTA is expected to play an important role in facilitating the implementation of SB375 mandated Sustainable Community Strategies. Although this role is not clearly laid out in SB 375, MTA expects their most significant responsibility will be to cooperatively plan, develop, and implement regional projects that enhance the sustainability of the transportation system with a concentration on reducing GHGs and helping the MPO and subregions achieve the GHG reduction target. Additional support MTA will provide to implementSB375 includes: identifying transportation investments that support the land use component of the SCS; providing incentives that encourage these investments; working in partnership with SCAG and the Subregions in developing Sustainable Community Strategies; as well as participating and contributing to a regional dialogue on promoting smart growth and sustainable communities.

GHG Mitigation Efforts

Along with its sustainability planning activities, the MTA has three main ongoing GHG mitigation focused efforts, these include: 1) an internal process of tracking and managing the GHG emissions associated with their operations and management, 2) an effort to enhance their energy efficiency and portfolio of renewable and alternative energy resources, and 3) a the broader role the agency has taken on of coordinating other agencies and developing important climate related research, surveys, and conferences. For a more detailed review of Metro's efforts to reduce its environmental impact and improve efficiencies, see Metro's recently adopted Environmental Policy, its 2008 Sustainability Implementation Plan or its 2009 Baseline Sustainability Report.

[PULL QUOTE] *MTA will also play an important role in facilitating the implementation of Sustainable Community Strategies, which are mandated by SB 375. Although this role is not explicitly laid out in SB 375, MTA expects that its most significant responsibility will be to plan, develop, and implement regional projects that enhance the transportation system with a concentration on reducing VMTs and helping the MPO's achieve their GHG reduction targets.*

[SIDEBAR: Measure R]
In November 2008, Los Angeles voters passed Measure R, a Los Angeles County ballot initiative which created an additional 1/2 cent sales tax increase on the dollar within the County. Revenue from this additional tax increase is managed and allocated by MTA, and is dedicated to funding transportation and transit infrastructure upgrades and improvements. In addition, 15 percent of the Measure R tax is designated to be distributed under the local return guidelines to cities and the County of Los Angeles for transportation purposes. The tax, which went into effect in July of 2009, was originally expected to generate $40 billion in new local sales tax revenue over 30 years, however the economic slump is expected to decrease that amount. The MTA received its first delivery of Measure R revenue in September of 2009, and has since begun the process of distributing the funds according to the voter approved Expenditure Plan. In addition to generally promoting congestion relief and transit improvements, many of the projects funded under Measure R will likely provide significant GHG emissions reduction benefits. Thus, if the funding is utilized and allocated strategically, there may be opportunities for local governments to use Measure R funds to both meet the goals of Measure R, as well as their emissions reduction goals under SB 375 and their Sustainable Communities Strategies. To review Measure R's Expenditure Plan, visit: http://www.metro.net/measurer

Southern California Public Power Authority

The Southern California Public Power Authority (SCPPA) is a joint powers authority formed in 1980 to finance the acquisition of electrical generation and transmission resources for its members. SCPPA is a customer-owned non-profit entity, and it is governed by a Board of Directors comprised of an appointee from each member entity. SCPPA members include the cities of Anaheim, Azusa, Banning, Burbank, Cerritos, Colton, Glendale, Los Angeles, Pasadena, Riverside, Vernon, in addition to the Imperial Irrigation District. Currently, SCPPA runs and maintains five generation projects, and 3 major transmission projects that bring power into Southern California from neighboring states. These projects provide power for approximately 2 million customers over an area of 7,000 square miles.

As of 2009, over 50 percent of SCPPA's generation remains coal based, much of which is provided from the Intermountain Power Project in Utah and the San Juan Project in New Mexico. SCPPA has been working closely with CARB in the AB 32 implementation process, and it expects to meet the statewide RPS goals. To meet these goals however, SCPPA forecasts that its retail electricity rates will increase by an average of 30 percent. SCPPA also plays an important legislative advocacy role at the state and federal level on behalf of its members. For example, SCPPA participates and comments on the statewide AB 32 implementation process as well as on the deliberations for the federal Waxman-Markey bill.

Southern California Edison

Southern California Edison, a subsidiary of Edison International, is one of California's three major Investor Owned Utilities (IOU). Edison serves approximately 13 million people within a 50,000-square-mile service area. Edison has been proactive in implementing a variety of different climate-related programs, such as: supporting the California Green Community Challenge, coordinating with the PUC and CEC on administering and developing consumer and business rebate programs (for renewable energy and energy efficiency), and working to reduce the environmental impacts of internal operations and management. Nevertheless, the company remains skeptical and resistant to meeting California's targeted renewable portfolio standard of 33 percent by 2020, nor 20 percent by 2010. Furthermore, some of Edison's more progressive programs have been poorly marketed to potential users, such as its Cool Planet Project in association with the Climate Registry.

Metropolitan Water District of Southern California

The Metropolitan Water District of Southern California (MWD) is a consortium of 14 cities and 12 municipal water districts. MWD provides water to approximately 18 million people within its 5,200-square-mile service area, making it the largest supplier of treated water in the United States. In addressing climate change, MWD's main role has been to prepare the region's water distribution system and infrastructure for potential seasonal precipitation and mountain snow pack changes. This adaptation role has taken two main forms, through consumer education and conservation programs (such as bewaterwise.com), and through infrastructure improvements to create a more robust and resilient distribution and storage system. Although framed mostly as adaptive strategies, many of these efforts also have mitigation benefits, since the pumping, treating, and heating of water resources all involve energy intensive processes.

Southern California Gas

The Southern California Gas Company (SoCal Gas) is the largest natural gas distribution utility in the nation, and provides nearly 1 trillion cubic feet of gas annually to more than 20 million consumers within Central and Southern California. The company is a subsidiary of Sempra Energy, a San Diego-based energy services holding company. SoCal Gas has a variety of ongoing energy efficiency and environmental programs, including a free energy-saving home improvement and furnace repair or replacement service for low-income homeowners, a rebate and incentive program for businesses that install certain distributed generation technologies (pursuant to AB 2778), and free energy assessments and evaluations for qualified industrial customers. SoCal Gas also supports a variety of other regional environmental and energy efficiency programs, such as the South Bay Environmental Services Center and the Greening of California speaker series.

Local Governments: *Climate Programs, Policies And Legislation*

California cities, especially those in the Los Angeles region, are on the front lines of climate change, both in terms of having to deal with the long term effects of climate change, as well as being major emitters of GHG emissions. Recognizing this, some cities within the Los Angeles region have already begun the process of identifying strategies for reducing their GHG emissions and preparing adaptation strategies. A small number of cities have begun the process of developing and implementing comprehensive climate action plans, which are designed to meet specific emissions reduction targets over specific time-frames through a variety of measures.

Other cities have taken smaller steps, such as implementing green building programs or environmentally preferred purchasing programs. Even more cities have also recognized the need to consider energy use and the environment in their long-range planning efforts. A big gap remains between cities that have taken more aggressive approaches to address climate change, and those that have not. Nevertheless, consensus is growing for individual jurisdictions to act as a coordinated region. The following section discusses and identifies the climate action programs and policies of a representative sample of cities that are actively working to address climate change issues. This chapter also describes some of the opportunities and barriers that these programs face.

[SIDEBAR: City Climate Action Planning at a Glance]
While most cities in the region have not established comprehensive climate action plans, many cities have implemented a variety of local programs to help address climate and energy concerns. Although it was beyond the scope of this study to identify the different climate related activities for every city in Southern California, numerous other studies have tracked these efforts to some degree. These resources include the following:

Los Angeles County Sustainability Survey Report - 2009
This report documents the results of a survey distributed among local government officials in Los Angeles County that inquires to local environmental sustainability efforts. MTA drafted this report in partnership with the Local Government Commission.

The California Planners' Book of Lists 2009
The Book of Lists is a statewide review of planning related programs among local governments in California. The list is updated annually by the Office of Planning and Research.
Link:
http://www.opr.ca.gov/planning/publications/2009bol.pdf

Cities & Counties Addressing Climate Change
In addition to its larger Book of Lists, the Office of Planning and Research also created a more specific list identifying a significant number of California cities and counties with active climate action programs.
Link:
http://www.opr.ca.gov/ceqa/pdfs/City_and_County_Plans_Addressing_Climate_Change.pdf

Local Government Green Building Ordinances in California
This document, maintained by the Attorney General, identifies local governments within the State that have implemented a variety of different green building ordinances.
Link:
http://ag.ca.gov/globalwarming/pdf/green_building.pdf

City of Los Angeles

The City of Los Angeles is the largest city in California, and the second largest in the United States. The City stretches over 469 square miles and has an estimated population of 3.9 million. The city is governed by a mayor-council system. The current mayor is Antonio Villaraigosa, and there are 15 city council districts represented on the city council.

The City has embarked on several "green" initiatives over the past 15 years, ranging from conservation to recycling to electric cars. Although historically many programs have been more "sizzle" than substance, in the last five years considerable effort has been organized by local NGOs to make the green agenda a top priority and one that would have measurable results. Beginning with the Clean Air Action Plan, the Million Trees program, and LADWP renewable energy goals, the City began to focus more on environmental stewardship. Finally, the City tied most of these separate initiatives together to meet voluntary and forthcoming mandated GHG reduction goals.

Climate Programs & Initiatives

The City enacted GreenLA in May of 2007, entitled "An Action Plan to Lead the Nation in Fighting Global Warming." Green LA is the implementation component of the larger environmental legislation, ClimateLA. The GreenLA climate action plan was developed to reduce the City's GHG emissions 35 percent below 1990 levels by 2030, going beyond the targets of the Kyoto Protocol and representing one of the most ambitious goals of any large U.S. city. One of its major initiatives is increasing the City's use of renewable energy to 35 percent by 2020, in addition to implementing over 50 other initiatives that will reduce the City's carbon footprint. While the emphasis is first on municipal facilities and operations, several measures address programs to reduce emissions in the community.

The action plans are arranged according to the "Focus Areas" in the GreenLA Climate Action Plan, which are Energy, Water, Transportation, Land Use, Waste, Open Space and Greening, Green Economy, efforts by the Proprietary Departments, and Climate Change Education. Appendix A provides a sampling of GreenLA action initiatives and departmental goals, their opportunities and challenges, and leading agencies involved. In the near future, they will also address adaptation strategies; namely how the city government can adapt, and assist our residents and businesses in adapting, to changes in our climate that are already occurring. The City will create incentives for all sectors of the community to reduce their own emissions, by making carbon reduction a smart economic choice.

Starting in late 2008, the City initiated an annual GHG emissions inventory for municipal operations. Although not yet required by state law, the inventory includes emissions from energy use for buildings, facilities, and vehicles owned and/or operated by the City government. Beyond L.A.'s voluntary plan to reduce GHG emissions, state law mandates specified city-owned facilities to report their emissions. Building upon the preliminary assessment prepared for the GreenLA Climate Action Plan, the the city will also be participating in a community-wide inventory of GHG emissions.

> **[PULL QUOTE]** *One of CliamteLA's major initiatives is increasing the City's use of renewable energy to 35 percent by 2020, in addition to implementing over 50 other initiatives that will reduce the City's carbon footprint. While the emphasis is first on municipal facilities and operations, several measures address programs to reduce emissions in the community.*

GREEN LA Update: June 2009

As of June 2009, Commissioner Bodke, President of the Environmental Affairs Commission (EAC), made the following status update regarding the EAC's role in assisting ELA with the implementation of ClimateLA. There are a number of policy directives in need of more assistance that EAC could explore, such as:

- EAC could approach the 50 measures on the ClimateLA Plan by: city departments; issues; and/or specific project.
- EAC to include science experts to discuss air quality and the impacts for the residents living in the City. EAC to have a broader discussion from a policy direction in order to provide recommendations to the Mayor's Office. EAC to convene 3-5 forums in the

year that would address environmental topics with science experts, city departments, and non-profit organizations.

- EAC to identify issues with the Mayor's Office and ELA in order to establish a priority list for the assessment of the ClimateLA Plan.

- EAC could consider a hearing process that could integrate: 1) reporting by city departments on actions; and, 2) input from science experts.

Expected GHG Reduction from ClimateLA/GreenLA Measures: Based on available calculations, fully executing the current ClimateLA measures appears sufficient to meet the 35 percent reduction goals ahead of 2030. Preliminary Calculations estimate that an increasing renewable energy resource up to 20 percent by 2010 and 35 percent by 2020 will reduce GHG emissions by about 1.5 and 4.5 million metric tons CO^2, respectively, compared to 2008. The 35 percent level will provide a savings of 153,000 metric tons of CO^2 per year from indirect GHG emissions originating from Council controlled departments. There would be an indirect savings from proprietary departments amounting to 109,000 MT CO^2/yr. Thus, for all departments, a savings of 262,000 MT CO^2/yr of indirect emissions will be achieved. The calculations assume no growth in the baseline inventory (2004) and no changes in the LADWP emissions factor.

City of Los Angeles Agencies

CRA/LA

The Community Redevelopment Agency of the City of Los Angeles (CRA/LA) is a public agency regulated by the State of California but operated by and within the City of Los Angeles. CRA/LA makes strategic investments to create economic opportunity and improve the quality of life for the people who live and work in LA neighborhoods. CRA/LA, like all redevelopment agencies, is funded by tax-increments. CRA/LA has two major climate-related initiatives. The first initiative requires new construction or major rehabilitation projects with $1 million or more of investment from CRA/LA to achieve a minimum of LEED® Silver certification.

The second initiative involves the Cleantech Manufacturing Center, which is proposed to be a hub of innovative technology manufacturing sites along the Los Angeles River, on locations that had previously been unusable brownfields. CRA/LA has the ambitious goal of making Los Angeles the world's clean technology capital. CRA/LA is actively seeking clean technology firms from around the world to locate "green" research, development and industrial manufacturing sites at the Center. The Center is part of CRA/LA's Central Industrial Redevelopment Project Area, the California State Enterprise Zone, and a Federal Empowerment Zone. Firms locating to the Center will have access to city, state, and federal financial incentives.

Los Angeles World Airports

LAWA's goal is to reduce GHG emissions 35 percent below 1990 levels by 2030. LAWA is also working aggressively to implement sustainability practices and to develop programs that will reduce waste and pollutants. LAWA's first step involved gathering the information necessary to compile and calculate an accurate GHG emissions inventory. LAWA is now in the process of setting goals and targets and LAWA will develop a comprehensive database of emissions sources and impacts for GHGs and criteria and toxic air pollutants. It is important to note that the GHG reporting protocol and framework that LAWA develops will likely become benchmarks for other airports to use because a standardized GHG reporting protocol does not exist for airports.

Jet engines and aircrafts in flight contribute the majority of aviation-related GHG emissions. LAWA does not operate aircraft, but instead provides the infrastructure (runways and terminals) and services (air traffic control, police, security) that support the aviation industry. The majority of GHG emissions associated with airport operations thus fall outside of the direct control of LAWA. However, LAWA remains committed to implementing a plan that will reduce its own emissions and facilitate reductions by airport tenants. Passenger and cargo vehicles, ground equipment that services aircraft, airport facilities such as terminals, and equipment used for the construction of airport infrastructure also contribute to aviation-related GHG emissions.

One LAWA program is the Sustainability Performance Improvement Management System (SPIMS). LAWA developed SPIMS as a tool to aid in the implementation and tracking of sustainability initiatives. SPIMS will also allow LAWA to easily recognize, and then communicate, environmental stewardship accomplishments. SPIMS focuses on the "Triple Bottom Line" (TBL) approach to sustainability, which recognizes that organizations must measure success not only by the traditional bottom line of financial performance, but also by the impact on the broader economy, the environment, and society-at-large. With the implementation of SPIMS, LAWA committed to integrating sustainable practices into its daily operations throughout the organization.

Port of Los Angeles

As directed by the GREEN LA Plan, the Port of Los Angeles (POLA) developed a Harbor Department Climate Action Plan to examine opportunities to reduce GHG emissions from its operations. In March 2006, POLA joined the California Climate Action Registry (CCAR) and it began to take inventory of baseline GHG emissions for the City's Harbor Department for that year. The inventory required POLA to assess the direct and indirect emissions from stationary and mobile sources that are under the Harbor Department's operational control. The completed inventory was verified by an independent third party in November 2007. GHG reporting transitioned from CCAR to the Registry in 2009.

The San Pedro Bay Ports Clean Air Action Plan (CAAP) aims to cut air pollution and reduce health

risks at the ports of Los Angeles and Long Beach. This landmark plan commits both ports to an aggressive goal to reduce pollution by at least 45 percent over the next five years. The $2 billion in CAAP funding will address all tenant operations and all port-related emission sources — ships, trains, trucks, terminal equipment, and harbor craft — to significantly reduce health risks posed by air pollution. Although the CAAP primarily aims to reduce criteria pollutants and air toxics, several of the strategies also reduce GHG emissions. Current total monetary commitments for each funding entity over the next five years are as follows:

- Port of Los Angeles—$177,500,000
- Port of Long Beach—$240,400,000
- SCAQMD—$47,000,000
- Environmental Cargo Fee/Bond Funding—$2,000,000,000
- *Industry is expected to fund all strategies that are not covered by the above funding commitments.*

With regard to GHG reduction strategies, CAAP will outline current and future measures in municipal Harbor Department operations that will reduce GHG emissions. Each measure is accompanied by an estimated ranking of high, medium, or low GHG reduction potential. Other Harbor Department programs that have the potential to reduce GHGs include the use of alternative fuel vehicles, a tree-planting program, water conservation efforts, recycling, commute reduction, and public outreach. POLA is also working with regional planning groups to develop more efficient ways to move goods on a regional scale.

Los Angeles Department of Water and Power

The Los Angeles Department of Water and Power (LADWP) is the largest municipal utility in the nation. Established more than 100 years ago, LADWP currently delivers water and electricity to approximately 3.8 million residents and businesses in Los Angeles. As a revenue-producing proprietary department, LADWP transfers approximately 7 percent of its annual estimated electric revenues to the city of Los Angeles general fund. LADWP's operations are financed solely through the sale of water and electric services. Capital funds are raised through the sale of bonds. LADWP does not receive any tax support. A five-member Board of Water and Power Commissioners establishes LADWP policy. Board members are appointed by the Mayor and confirmed by the City Council for five-year terms.

Climate Programs & Initiatives

The LADWP Renewable Portfolio Standard (RPS) aims to increase the amount of energy that LADWP generates from renewable power sources to 20 percent by 2010 and to 35 percent by 2020. The RPS will provide a long-term framework to achieve the 20 percent goal without compromising power reliability or the financial stability of LAWDP and its customers. LADWP's adherence to the RPS requirement is estimated to result in an incremental cost of service increase of approximately $284 million annually, with an aggregate cost needed to achieve the 20 percent RPS target requirement projected to exceed $2 billion.

LADWP's Renewable Energy Program represents a multi-pronged approach to the goal of 20 percent renewables by 2010. LADWP is aggressively seeking renewable energy generation projects, including those that offer immediate facility ownership or long-term purchase agreements that have an ownership option. LADWP believes that while purchase agreements comprise part of the strategy to meet the 2010, ownership is critical in the long run. Concurrent with developing and purchasing renewable generation, LADWP plans to expand its transmission system to import renewable energy resources into Los Angeles. Two other key components of achieving the RPS goal include expansion of the Department's Solar Rooftop Incentive Program and Energy Efficiency programs.

Los Angeles Department of Public Works

The City of Los Angeles' Department of Public Works is responsible for the construction, renovation, and the operation of City facilities and infrastructure. In addition, Public Works has oversight responsibilities over its five Bureaus, the Bureaus of Contract Administration, Engineering, Sanitation, Street Lighting, and Street Services. The Department is administered by the Board of Public Works, a full-time, executive team comprised of five members appointed by the Mayor and confirmed by the City Council. Some of the City's

most aggressive climate programs are being implemented by Public Works and its Bureaus.

Climate Programs & Initiatives

LED Street Lighting Energy Efficiency Program: In early 2009, the Bureau of Street Lighting received funding to retrofit 140,000 existing street lights over a 5 year period with more efficient light emitting diodes (LED). This program is expected to to save the city $10 million annually in energy costs, while also reducing carbon emissions by 40,500 tons.

RENEW LA: The Recovering Energy, Natural Resources, and Economic Benefit from Waste for Los Angeles plan, or RENEW LA, was adopted by the City in 2006 to help the city meets its goal of diverting 70 percent of the City's waste away from landfills by 2015, and to further lay out a path towards achieving a 90 percent diversion rate by 2025. The Department of Public Works is currently in an ongoing process of selecting technologies to help meet these diversion objectives and also significantly reduce the greenhouse gas emissions associated with waste management/treatment.

Sustainable Building Initiative: The Bureau of Engineering has an ongoing Sustainable Design Implementation Program that provides city staff with training on green building design, and has assists in the incorporation of sustainable design measures in city projects. In addition, the city requires LEED certification for all Department of Public Works new construction buildings 7,500 square feet or larger.

Local Efforts by Cities within Los Angeles County

The following section reviews a representative sample of cities within Los Angeles County that have active programs and initiatives to address climate change. The cities reviewed include the cities of Pasadena, Santa Monica, Long Beach, and Manhattan Beach, all of which are at various stages in implementing their respective climate action programs and initiatives.

City Of Pasadena

Pasadena is the 6th largest city in Los Angeles County, and the cultural center of the San Gabriel Valley. As of 2007, Pasadena's estimated population was 148,126, making it the 160th largest city in the United States. The South Coast Air Quality Management District (SCAQMD) reports that in 2007, Pasadena had no unhealthful ozone days, a decrease from 7 unhealthful ozone days in 2003 and 71 in 1992. All Pasadena residents and businesses are within 1/2 mile from a public transit stop. There are 29 public transit routes throughout the city and 710 bus stop locations. Major employers include Jet Propulsion Laboratory, California Institute of Technology, Huntington Memorial Hospital, Bank of America, Kaiser Permanente, Pasadena Unified School District, Pasadena City College, Countrywide Credit Industries, City of Pasadena, SBC, and the Ralph M. Parsons Company.

Pasadena's Environmental Advisory Commission consists of nine residents. The Commission advises the city council and makes policy recommendations in support of the goals and objectives of the City's Environmental Charter. It also monitors and guide Pasadena's Green City Action Plan. The commission holds monthly meetings, which are open to the public, and it serves as a forum for the discussion of environmental issues. In addition, the city council approved funding for a full-time environmental and sustainability planner. This position will assist in implementing the City's action plans, supporting the environmental advisory commission, conducting research on related issues, and staying current on best practices.

Climate Programs & Initiatives

City of Pasadena Green City Action Plan:
To help address concerns of population growth and its strain on natural resources, Pasadena launched a comprehensive environmental action plan that will accelerate the city's commitment to sustainability. The goals contained within the Green City Action Plan follow the framework of the United Nations Urban Environmental Accords of 2005. The Accords offer cities 21 specific goals to accomplish by World Environment Day 2012, with three goals assigned to each of the following urban sustainability areas: 1) Energy; 2) Waste Reduction; 3) Urban Design; 4) Urban Nature; 5) Transportation; 6) Environmental Health; and 7) Water.

At the end of the seven years (2012), a city that has successfully implemented actions will be recognized by the United Nations as a Green City with a ranking determined by the number of actions completed. Pasadena hopes to reduce its GHG emissions by 25 percent by 2030.

Implementation Status

- **Energy:** The city's goals are to reduce the peak energy load by 10 percent (32 MW) by 2012 and to reduce energy consumption by an average of 1.33 percent per year through 2016. The city increased its state-qualifying renewable energy from 2 percent in 2006 to 8 percent in 2008 and expects to reach 16 percent by 2012. This year, the City contracted to purchase 30,000 MWh of power generated by methane gas.

- **Waste:** Pasadena has over 12 recycling and composting programs in place. Per capita solid waste disposal decreased from 1,634 pounds in 2006 to 1,498 pounds in 2008, a decrease of 136 pounds per capita (8 percent) over a 3-year period. An additional annual reduction of 272 pounds per capita is needed to reach their 25 percent reduction goal by 2012.

- **Green Building:** In 2005, the city council approved the Green Building Practices Ordinance, and adopted by reference the LEED (Leadership in Energy and Environmental Design) green building rating system for private sector and municipal buildings. To date, five projects have received LEED certification, and 23 projects are LEED registered.

- **Transportation:** The city has implemented a policy to reduce the percentage of commute trips by single occupancy vehicles. The Mobility Element objectives support that goal by increasing the availability and use of transit, promoting bicycle and pedestrian travel, enforcing stricter parking requirements for new developments in transit-oriented zones, and managing traffic on multi-modal corridors.

- **Water:** Pasadena is developing a comprehensive a Water Conservation Plan which targets an overall community reduction of water use by levels of 10 percent and 20 percent. To improve the reliability of water supply the city is developing and constructing groundwater perchlorate and volatile organic compound treatment facilities which are expected to be operational by 2011. From 2006 to 2005, 55 percent of Pasadena's well capacity was closed due to contamination.

City of Santa Monica

The city of Santa Monica is well known as one of the leading sustainable cities in the United States. Three of every four of the city's public works vehicles run on alternative fuel, making it among the largest such fleets in the country. All public buildings use renewable energy. In the last 15 years, the city has cut GHG emissions by nearly 10 percent. City officials and residents have made the ongoing cleanup of the Santa Monica Bay a priority--an urban runoff facility catches 3.5 million gallons of water each week that would otherwise flow into the Santa Monica Bay.

Climate Programs & Initiatives

The Santa Monica Task Force on the Environment has provided leadership on behalf of the community for the Sustainable City Plan (SCP) since its adoption in 1994. With the update and expansion of the Sustainable City Plan into new and more diverse goal areas, the Task Force on the Environment recommended the creation of a Sustainable City Task Force (SCTF). The SCTF includes broad representation from community stakeholders with expertise in all of the SCP goal areas to guide the program in the future.

An interdepartmental Sustainable City Advisory Team, chaired by a representative from the City Manager's office, was created to coordinate existing city activities so they are consistent with the Sustainable City Plan goals and to help facilitate the future implementation of innovative programs and policies. Members of this group serve as liaisons between the Sustainable City Plan and their respective departments. The SCTF and the Sustainable City Advisory Team are both responsible for developing a comprehensive implementation plan for meeting goals and targets, and for coordinating implementation, both inter-departmentally and within community stakeholder groups.

Santa Monica Sustainable City Plan
In 1994, the Santa Monica City Council was among the first governing bodies in the region to take steps to address these pressures locally by adopting the Santa Monica Sustainable City Program. The program includes goals and strategies for the city government and all sectors of the community to conserve and enhance its local resources, safeguard human health and the environment, maintain a healthy and diverse economy, and improve the livability and quality of life for all community members in Santa Monica.

To check progress toward meeting these goals, numerical indicators were developed and specific targets were set for the city to achieve by the year 2000 in four goal areas: 1) Resource Conservation, 2) Transportation, 3) Pollution Prevention and Public Health Protection, and 4) Community and Economic Development. By 2001, following seven years of implementation, the Santa Monica Sustainable City Program had achieved much success. For each goal, specific indicators have been developed to measure progress toward meeting the goals of the Sustainable City Plan: System level indicators measure the state, condition, or pressures on a community-wide basis for each respective goal area, and program level indicators measure the performance or effectiveness of specific programs, policies, or actions taken by the city government or other stakeholders in the community. Specific Targets have been created for many of the indicators.

Total GHG Emission Reductions
Santa Monica pledges that total citywide emissions will be reduced by at least 30 percent below 1990 levels by 2015 for city operations and at least 15 percent below 1990 levels by 2015 citywide. By switching the city's electricity source to 100 percent renewable energy, Santa Monica reduced GHG emissions by 13,762 tons in the first year. The additional cost to the city was $120,000, or a 5 percent increase over prior electric costs.

City of Long Beach

Long Beach is the 36th-largest city in the nation and the sixth-largest in California, with a population of almost half a million. Additionally, Long Beach is the 2nd largest city within the Los Angeles metropolitan area and home to one of the largest ports in the nation, the Port of Long Beach. The eleven-member Sustainable City Commission advises the City Council on environmental issues such as buildings and neighborhoods, urban nature, transportation, water, energy, waste reduction, and eco products and services, and has been responsible for creating the Sustainable City Action Plan. The Board of Harbor Commissioners (BHC) has significant oversight power over the climate change policies of the Port of Long Beach. In November 2004, the BHC directed the port to develop a comprehensive environmental policy for BHC consideration.

Climate Programs & Initiatives

Green Port Policy
The Port of Long Beach is committed to improving the environment, as demonstrated by its 20-year record of environmental protection programs. The Green Port Policy, which the Board adopted in January 2005, is an aggressive, comprehensive, and coordinated approach to reduce the negative impacts of port operations. The policy's five guiding principles are: 1) Protect the community from harmful environmental impacts of port operations; 2) Distinguish the port as a leader in environmental stewardship and compliance; 3) Promote sustainability; 4) Employ best available technology to avoid or reduce environmental impacts; and 5) Engage and educate the community.

Sustainable City Action Plan
The city of Long Beach is at the forefront of incorporating sustainable principles into municipal government and promoting the development of "green" jobs. The Citywide Strategic Plan identifies "Becoming a Sustainable City" as a primary strategic goal. The Office of Sustainability drafted a Sustainable City Action Plan, which as of fall 2009 is in the process of public review and approval. The action plans for each area are listed below:

- **Buildings and Neighborhoods:** Accelerate the use of green building techniques in new development, renovations, and retrofits to improve building efficiency and health; enhance and enliven corridors and neighborhoods with green infrastructure and public spaces; and enhance community engagement to encourage people to get out of their cars and into their neighborhoods.

- **Energy:** Shrink Long Beach's carbon footprint by reducing GHG emissions; ensure all of the city of Long Beach's operational needs are met through energy efficiency, conservation and renewable energy sources; and reduce electricity and natural gas consumption of the Long Beach community.

- **Green Economy & Lifestyle**: Establish Long Beach as the leading California city for green business and green job growth; promote individual action that encourages the active and green lifestyles that support a green economy.

- **Transportation**: Provide an environment and culture where walking and biking are safe, viable, and preferred modes of transportation in the city; implement the Clean Air Action Plan (CAAP), designed to significantly reduce port-related air emissions over a 5-year plan, through a partnership with the Harbor Department and its tenants.

- **Waste Reduction:** Increase diversion by reducing waste and increasing recycling and reuse; increase awareness and promote the concepts of reduce, reuse, and recycle; and utilize recyclable materials as a raw materials source for industrial development to enhance the recycled-materials market in Long Beach.

- **Water:** Ensure a sustainable water supply through conservation and reduced dependence on imported water; and implement low impact development strategies to reduce runoff and pollution at the source and increase the beneficial use of rainwater.

- **Transportation**: Reduce emissions and improve air quality by moving toward more fuel efficient and alternative fuel vehicles, and increase public transit ridership by expanding access, infrastructure, and convenience.

[SIDEBAR: Implementation Status – Green Port Policy]

Many of the programs are in-place and currently generating green benefits. A fully integrated, resource-loaded master schedule is being developed and will continue to evolve as the number of environmental programs expands. Periodic progress reporting (e.g., quarterly) to the Long Beach City Council and the BHC is underway and is fundamental to the successful implementation and enhancement of the Green Port Policy. In order to ensure that the policy is implemented throughout the terminals, it will be necessary to make changes to the port's leasing policy. Negotiating with tenants requires flexibility; however, the leasing policy must have as a key agenda the greening of the port.

[SIDEBAR: Implementation Status – Sustainable City Action Plan]

Long Beach has been granted $4.3 million for federal stimulus projects related to energy efficiency projects, along with $10 million in transit/bike grants for use over the next three years. Additionally, the ports are proposing to provide over $400 million over the next five years to support emission reduction programs. The plan seeks to identify funding sources, and leverage public and private dollars in order to fund many of the initiatives listed above.

City Of Manhattan Beach

Manhattan Beach is a city of 33,852,located in southwestern Los Angeles County and is one of three beach cities of the South Bay area. The city has a total area of 10.4 square miles, which includes 3.9 square miles as land and 6.4 square miles as water. The City of Manhattan Beach is governed by a five member City Council. City Council Members are elected every four years. The office of the Mayor of Manhattan Beach rotates every nine months among the members of the City Council, so that each City Council Member serves one term as mayor.

Climate Programs & Initiatives

Resolution No. 6111 includes Manhattan Beach as a member in the Cities for Climate Protection Campaign (CCP), a program to promote local actions to reduce GHG emissions developed by the International Council for Local Environmental Initiatives (ICLEI). By joining this voluntary program, the Manhattan Beach committed to the establishment of a GHG reduction goal and development of an action plan for achieving that goal. In return, the Manhattan Beach receives free assistance from ICLEI for the development and implementation of the action plan.

As a participant in the Cities for Climate Protection Campaign, the city of Manhattan Beach pledges to: 1) Take a leadership role in increasing energy efficiency and reducing GHG emissions from Municipal Operations; 2) Develop a Local Action Plan to increase energy efficiency and reduce greenhouse emissions throughout the community, 3) Be an advocate for energy efficiency and climate protection at the state and national levels.

Implementation Status
City staff completed Milestone 1, a 2005 GHG emissions inventory for Manhattan Beach's municipal operations. The inventory was the critical first step toward reducing the city's contribution to GHG emissions because it highlights the largest sources of municipal emissions, identifies trends in emissions, and provides a baseline from which to evaluate the success of future changes. The inventory includes emissions resulting from:

- City owned and operated buildings (including city recreation facilities and parks)
- Municipal fleet fuel usage (includes fuel usage for our contracted services, i.e. trash collection, street sweeping, and landscape maintenance)
- City employee commuting
- Streetlights and traffic signals
- Water, storm water, and waste water pump stations
- Trash generated by city employees at city facilities

Initial results of the ICLEI pilot project have shown that the other pilot cities have achieved significant energy savings and corresponding financial savings by taking steps to reduce their emissions. With total emissions reduction goal set at 20 percent below 2005 levels, the next milestone in the Climate Protection Campaign is to form a Local Climate Action Plan.

[SIDEBAR: ICLEI's Major Milestones and Benchmarks for Climate Change Plan]

- **Milestone 1:** Conduct a Baseline Emissions Inventory
- **Milestone 2:** Establish an Emissions Reduction Goal
- **Milestone 3:** Develop a Local Climate Action Plan to Achieve the Goal
- **Milestone 4:** Implement the Local Climate Action Plan
- **Milestone 5:** Track Progress and Report Performance

Non-Governmental Organizations: *Climate Coalitions & Nonprofits*

Chapter five highlights the non-profit organizations, NGOs, and coalitions engaged in climate action related activities and programs impacting the Los Angeles region. The entities fall into two main categories: 1.) coalitions and their member organizations that are advocating for climate action and 2.) organizations that are supporting local climate action planning by providing information, resources, and tools. Given the scope of this report, not all relevant entities and organizations that are supporting climate action are profiled. Instead, the following highlights key groups and entities with particularly robust involvement in climate action related activities and programs.

Regional Climate Focused Coalitions

Apollo Alliance

On a national level, the Apollo Alliance was launched in the aftermath of the 9/11 tragedy to catalyze a clean energy revolution in America. Comprised of labor, business, environmental, and community leaders, the Apollo Alliance is a coalition that promotes investments in energy efficiency, clean power, mass transit, next-generation vehicles, emerging technology, and education and training.

Strategic Concepts in Organizing and Policy Education (SCOPE) convened the Los Angeles Apollo Alliance in February 2006, and launched a three-to-five-year public policy campaign to ensure that low income communities are strategically connected to the job creation and environmental returns of an emerging green economy. Their research indicated that the development of a Green Industry in Los Angeles has the potential to revitalize inner city communities through quality job creation, career ladder training, and sustainable economic development.

Mission
To build a broad-based constituency in support of a sustainable, equitable, and clean energy economy that will create quality jobs for low-income people of color, create healthier and safer communities, and promote community based land use planning and economic development. Through policy alternatives, organizing, and on the ground results, the Apollo Alliance seeks to demonstrate that a socially just, environmentally sustainable, and economically prosperous future is attainable.

Objectives
The Los Angeles Apollo Alliance Green Jobs Initiative aims to train and place low income communities into careers in the green manufacturing and green building sectors. Twenty-four organizations from the community, environmental and labor sectors developed an initial proposal to "green" Los Angeles' more than 1,000 city-owned buildings as an opportunity to stimulate local economic development and introduce cleaner, green technologies to inner city communities.

[SIDEBAR: The Los Angeles Apollo Alliance's Policy Platform:]

- Smart funding and investments for a cleaner tomorrow
- Clean renewable energy development
- Green building and infrastructure, including parks, community gardens, and open space
- Just and sustainable economic development
- Transparent and inclusive public policy decision-making

Key policy events:

- On August 16, 2006, Los Angeles Mayor Villaraigosa, City Council President Eric Garcetti, and City Councilman Herb Wesson signed a commitment to accept the "Apollo Challenge" and work with the Alliance to shape a green workforce development strategy.
- In 2008, Apollo launched the Green Retrofit Workforce Initiative, and on April 8, 2009, the City Council unanimously adopted an ordinance to begin green retrofits of all city buildings and connect low-income communities to the jobs created by this large-scale city project. Apollo is launching

their Green Career Ladder Training Program to begin training and placing low income residents in union apprenticeship programs and green jobs.

- In 2009, SCOPE and other members of the LA Apollo Alliance supported Measure B, which was narrowly defeated by voters.

ClimatePlan

In 2007, eleven environmental and planning non-profits groups came together to create ClimatePlan, in response to the need for coordinated action on AB 32. Their goal was to promote land use and transportation strategies to help achieve AB 32's GHG reduction targets. The organization is based in Sacramento with partners throughout California, mostly in the Bay Area and Sacramento. The American Lung Association partners with ClimatePlan staff in the Los Angeles region to educate and mobilize the health community to support walkable, bike-able, transit oriented communities that will reduce GHG emissions and criteria pollutants. As of December 2009, both organizations have retained consultants to advocate on climate change mitigation strategies in the Southern California region.

Mission
To advance policies and programs to address the relationship between land use policy and climate change, and leverage the resources and partnerships necessary to realize more sustainable and equitable development throughout California.

Policy Background
ClimatePlan's initial focus was ensuring that plans to implement AB 32 included specific policies and a high target for the reduction of emissions from the land use sector. According to the ClimatePlan website, when the draft AB 32 Scoping Plan was released in June 2008, it contained very weak language around land use and a conservative target of just 2 million metric tons (MMT) of GHG reductions by 2020.

ClimatePlan responded by commissioning a national expert, Reid Ewing, to do a study that would more accurately determine the amount of GHGs that can be reduced from land use by implementing smart growth strategies. His analysis demonstrated that a target of 11-14 MMT was achievable and advisable, and this became the basis for ClimatePlan's policy platform and organizing efforts. This led to dozens of organizations endorsing ClimatePlan's position, and dramatically raised the profile of the land use sector components of the AB 32 Scoping Plan process.

Climate plan's top policy priorities include:

- Ensure that the California Air Resources Board (CARB) adopts ambitious SB 375 targets and supportive policies for reducing vehicle miles traveled (VMT).

- Build support in key regions for strong implementation of SB 375 and related policies. ClimatePlan's will focus these efforts in the San Joaquin Valley and Southern California.

- Strengthen state and federal campaigns to win additional policy reforms. State and federal policy reforms beyond SB 375 are needed to achieve ClimatePlan's goals to significantly reduce GHG emissions.

[SIDEBAR: Founding Partners:]
* Denotes Steering Committee member
- American Farmland Trust*
- California Center for Regional Leadership
- California League of Conservation Voters
- Center for Clean Air Policy
- Greenbelt Alliance*
- Local Government Commission*
- Natural Resources Defense Council*
- Pacific Forest Trust
- Planning and Conservation League
- Sierra Club
- TransForm (ClimatePlan's fiscal sponsor) *

Other partners:
- American Lung Association*
- Breathe California
- EHL
- Great Valley Center
- Housing CA*
- Latino Issues Forum
- Move LA
- PolicyLink*
- Public Health Law and Policy
- Safe Routes to Schools
- San Francisco Urban
- Research Association
- Smart Growth America*
- Trust for Public Land
- Urban Habitat*
- Urban Land Institute

Global Warming Action Coalition

The Global Warming Action Coalition (GWAC) is an informal coalition of environmental, health, and public interest organizations working toward implementation of climate change policies in California that will protect public health, protect the state's environment and economy. The coalition's structure enables the public interest community to share information and resources, coordinate on messaging and strategy and thereby increase its effectiveness in advancing more protective public health and environmental policies. GWAC is coordinated by the Better World Group, a consulting practice based in Burbank. The majority of GWAC's efforts and its most active members are based in Sacramento.

Policy Priorities
The role of GWAC is to support, monitor, and participate in the implementation of significant climate policies in California. Specifically, GWAC plays a major role in supporting the implementation of The Global Warming Solutions Act of 2006 (AB 32) and other climate policies to help the State meet its GHG reduction goals. SB 375 is an example of a sector specific law that several GWAC members- also members of ClimatePlan- are helping to implement with the goal to ensure reductions of GHG emissions from the light car and truck sector through land use changes. Members also support the implementation of SB 1368, the Greenhouse Gas Emissions Performance Standard, which requires the California Energy Commission and the California Public Utilities Commission to set a GHG emissions standard for electricity used in California.

Due to the large variety of sectors that affect GHG emissions and the number of issues areas involved in climate policy at a state level, GWAC is organized into both sector teams and issue teams.

Sector teams include:

- Electricity
- Industrial
- Waste
- Water
- Land Use/Smart Growth
- Forests
- Agriculture
- Transportation/Vehicles/Fuels

Issue teams include:

- Economics
- Public Health and Environmental Justice
- Cap-and-Trade Design
- Offsets
- Carbon Fee/Tax

[SIDEBAR: Global Warming Action Coalition members]
(November, 2009 Roster)
American Farmland Trust
American Lung Association in California
Breathe CA
California Climate and Agriculture Network
California Interfaith Power and Light
California League of Conservation Voters
California Tax Reform Association
California Wind Energy Association (CalWEA)
Californians Against Waste
CalPIRG
Center for Biological Diversity
Center for Clean Air Policy
Center for Energy Efficiency and Renewable Technologies
Center for Resource Solutions
Climate and Energy Funders Group
Climate Protection Campaign
ClimatePlan
Coalition for Clean Air
Community Environmental Council
Conservation Strategy Group
Defenders of Wildlife
Earthjustice
Energy Foundation
Energy Independence Now
Environment California
Environmental Defense Fund
Environmental Entrepreneurs
Environmental Working Group
Friends of the Earth
Global Green USA
International Council on Clean Transportation
National Parks Conservation Association
Natural Resources Defense Council
Pacific Forest Trust Planning and Conservation League
Price Consulting
Public Health Law & Policy
Redefining Progress
Sea Change Foundation
Sierra Club California
The Nature Conservancy
The Utility Reform Network

The Wilderness Society
TransForm
Trust for Public Land
Union of Concerned Scientist
Verde Group

Green LA Coalition

In November 2005, the Los Angeles Working Group on the Environment was formed to advise Los Angeles' newly elected mayor, Antonio Villaraigosa, his staff, and appointees on how to transform Los Angeles into a national leader in environmental health and equity. With the support of Liberty Hill Foundation and Environment Now, by June 2006, Green LA emerged from these meetings, a group which has grown into a vibrant coalition of over 100 environmental and environmental justice organizations that provide vision, expertise and community support toward making Los Angeles the greenest large city in America. The Green LA Institute is the education and capacity building arm of Green LA. The Institute brings timely information and access to policy makers to the environmental community. Liberty Hill supported and nurtured Green LA until June 2009, when Green LA became a project of Community Partners an incubator for innovative initiatives for Southern CA.

When first formed, the Coalition worked closely with an advisory committee of new mayoral appointees to the Harbor, Department of Water and Power, Environmental Affairs, Planning, Transportation, and Public Works Commissions to develop a set of recommendations for the city. While not necessarily focused on climate change, there were indirect links to climate mitigation or adaptation embedded in each recommendation. The Green LA Coalition is still guided by topic-oriented work groups, including the Transportation Work Group, Cumulative Impacts Work Group, Port Work Group, and the Urban Ecosystems/Water Work Group. These work groups correspond with the following five focus areas:

1. Transition our transportation networks to more environmentally responsible modes by advancing a Complete Streets paradigm and ensuring the City of Los Angeles prioritizes non-motorized transportation improvements; increasing the availability of mass transit options; and using city parking policy to reduce car dependency.
2. Improve health in communities of color by measuring all impacts on public health, establishing healthy baseline standards, and designating "priority zones" to improve cumulative impacts.
3. Green the Port of Los Angeles by reducing water and air pollution, ensuring that the benefits of goods movement outweigh the costs, and adopting healthy land use policies.
4. Use natural processes to improve the urban ecosystem by improving Watershed Management Plans and practices, resolving impediments to adopting ecosystems approach, and increasing access to open and green space.
5. Increase water safety, efficiency, and conservation, with the overall goal of establishing water independence from Northern California while assuring safe drinking water for the region.

The Green LA Coalition has more recently initiated a Green Jobs Leadership Network, which convenes the City of Los Angeles, environmental and environmental justice organizations, green business, labor, education and workforce development entities together with regional agencies to ensure the success of policies critical to environmental and economic sustainability.

[SIDEBAR: GREEN LA Coalition Members:]

American Institute of Architects, Los Angeles
American Jewish Committee
American Lung Association of California
Amigos de los Rios
Baldwin Hills Conservancy
Ballona Wetlands Land Trust
Breathe LA
California Environmental Rights Alliance
Californians for Pesticide Reform
California League of Conservation Voters Ed Fund
California Safe Schools
California State University, Northridge, Department of Urban Studies and Planning
Center for Community Action and Environmental Justice
The City Project
The Children's Clinic of Long Beach
Coalition for Community Change
Coalition for a Safe Environment
Coalition for Clean Air
Coalition on the Environment and Jewish Life
Comite Pro Uno
Communities for a Better Environment
Communities for Clean Ports
Desal Response Group/Southern California Watershed
Council
East Yard Communities for Environmental Justice
End Oil
Environment Now
Environmental Defense Fund
Environmental Justice Coalition for Water
Friends 4 Expo Transit
Friends of the Los Angeles River
Global Green USA
Harbor Watts Economic Development Corporation
Heal the Bay
Interfaith Environmental Council
Labor/Community Strategy Center/Bus Riders Union
Latino Issues Forum
Latino Urban Forum
Legal Aid Foundation of L.A.
Liberty Hill Foundation
Los Angeles Community Garden Council
Los Angeles Conservation Corps
Los Angeles County Bicycle Coalition
Los Angeles Neighborhood Land Trust
Long Beach Alliance for Children With Asthma
L. A. and San Gabriel Rivers Watershed Council
Materials and Applications, Architecture and Landscape Research
Mono Lake Committee
Move LA Coalition/Subway to the Sea
Mujeres de la Tierra
National Audubon Society
National Environmental Trust
Natural Resources Defense Council
The Nature Conservancy
Northeast Trees
Occidental College, Urban & Environmental Policy Institute
Pacoima Beautiful
People for Parks
Planning and Conservation League-Southern California
Progressive Christians Uniting
Physicians for Social Responsibility-Los Angeles
The River Project
Rivers and Mountains Conservancy
Rocketdyne Watch
Santa Monica Baykeeper
Save Ballona Wetlands
SEIU Local 721
SCOPE/L.A. Apollo Alliance
Sierra Club
Surfrider Foundation
Sustainable Works
The Transit Coalition
TreePeople
Trust for Public Land
UCLA, Labor & Occupational Safety & Health
Union de Vecinos
United Association of Plumbers and Pipefitters
USC, Community Outreach and Education, Southern
California Environmental Health Sciences Center
UCLA, Institute of the Environment
UCLA Labor Center
UCLA School of Law, Environmental Law Center
Urban Semillas
U.S. Green Building Council, Los Angeles Chapter
Western Justice Center Foundation
Wetlands Action Network
William C. Velasquez Institute

Key Nonprofits Supporting Climate Action

The Climate Action Reserve

(Formerly the California Climate Action Registry)

The California Climate Action Registry (California Registry) was created by the State of California in 2001 to promote and protect (in the event of state or federal regulation) the early actions of businesses to manage and reduce GHG emissions. Through this mandate, the California Registry developed the Climate Action Registry Reporting Tool (CARROT), to serve as a central database for emissions reports and tracking emissions inventories.

As demand for this service began to grow around the nation, the California Registry worked with other entities to establish a national spin-off organization, The Climate Registry. The Climate Registry is discussed in a separate profile (see below), but in short, it is the new organization tasked with expanding the California Registry's emissions reporting work to include all of North America. The Climate Registry has since become the umbrella organization within which the California Registry now operates, and starting in 2010, The Climate Registry will take over the California Registry's emissions tracking duties.

Climate Initiatives & Programs

The Climate Action Reserve operates the Climate Action Reserve Program, which is a national offsets program with the objective of ensuring the environmental and financial integrity of GHG emissions reduction projects intended to enter the U.S. carbon market. It does this by establishing standards for quantifying and verifying GHG emissions reduction projects, overseeing independent third party verification bodies, issuing carbon credits generated from such projects, and tracking the credits over time on a transparent, publicly accessible system.

The Center for Climate Action is a solutions-oriented program of the Climate Action Reserve. The Center brings together thought-leaders in environmental science, government, and business to discuss emerging issues in climate policy and build consensus for policy-oriented action to advance climate action in the West. In addition, the Center for Climate Action has corporate partners that fund training programs and other GHG related educational services.

The Climate Registry

The Climate Registry is a sister organization to the Climate Action Reserve. The Climate Registry is a non-profit (501(c)3) organization that serves as a GHG emissions registry for all of North America. Members are organizations that demonstrate their environmental leadership by voluntarily committing to measure, verify, and publicly report their GHG emissions to the Climate Registry. Members consist of corporate, nonprofit, and government entities, including cities, counties, U.S. states, Canadian provinces and territories, Mexican states, and Native Sovereign Nations.

The Climate Registry works in partnership with the California Air Resources Board, the U.S. Environmental Protection Agency, ICLEI, the U.S. Conference of Mayors' Climate Initiative, major industry and corporate partners, and others to support their climate change initiatives and to jointly develop consistent and effective activities addressing GHG emissions.

The Climate Registry members are organized into a variety of sectors, including:

- Building & Materials
- Consulting
- Defense
- Education
- Electric Power
- Electric Power & Water
- Federal Government
- Food/Beverage
- Government – Special District
- Healthcare
- Local Government
- Manufacturing
- Metals
- Mining
- Nonprofit
- Oil & Gas
- Printing
- Professional Services
- Public Utilities
- Retail

- Solid Waste and Recycling
- State Government
- Technology
- Telecommunications
- Transportation
- Travel/Leisure

Climate Initiatives & Programs

The Climate Registry's overarching objective is to provide consistent and transparent standards to calculate, verify, and publicly report GHG emissions, and encourage voluntary early actions by industry and businesses to increase energy efficiency and decrease GHG emissions. Its accounting infrastructure supports a wide variety of emissions reduction programs, including voluntary, regulatory, and market-based programs.

The Climate Registry's protocols outline best practices in GHG reporting from various business sectors, and the reporting requirements of the voluntary reporting program. Each protocol is developed by achieving a consensus among industry, environmental, and government stakeholders.

CoolCalifornia.org

History and Partners

CoolCalifornia.org was recently funded and launched by a coalition of state agency, university, and non-profit partners, including CARB, the Berkely Institute of the Environment, the Lawrence Berkely National Lab, the California Energy Commission, Next 10, and the California Public Utilities Commission. The site seeks to be a web-based, one-stop shop for all Californians to access easy-to-use tools to conserve energy and reduce their climate impact. Although the site has been relatively underutilized to date, CARB has designated funding to promote the site and increase its visibility and usability.

Climate Initiatives & Programs

The site contains a plethora of tools and resources directed to a variety of target audiences, including the individual consumer, small businesses, local governments, schools, and local governments. Of particular interest for this report is the section focused on local government action, which provides the following:

- **Climate Action Planning:** Tips for developing a climate action plan, including a climate action plan template, rules of thumb to estimate GHG reductions, and three sample measures for reducing GHG emissions.
- **Financial Resources:** Identifies available financial resources, and includes a short summary explaining the amount available and applicable deadlines.
- **Local Government Toolkit:** A selection of basic local strategies to aid local governments in addressing climate change.
- **Climate Calculators:** Lists of links to important modeling tools for climate action planning and GHG inventory tools including: the Climate Registry Information System (CRIS), ICLEI's Clean Air and Climate Protection (CCAP) calculators, and the new Local Government Operations Protocol (LGOP).
- **Government Case Studies:** the Los Angeles region profiles include information about the City of Los Angeles' Green LA Climate Action Plan and Santa Monica's Sustainable Santa Monica.

ICLEI USA Local Governments for Sustainability

The International Council for Local Environmental Initiatives, now called ICLEI Local Governments for Sustainability, was established in 1990 when more than 200 local governments from 43 countries convened at the United Nations. ICLEI USA was launched in 1995 and has grown from a handful of local governments participating in a pilot project to a network of more than 600 cities, towns, and counties striving to achieve tangible reductions in GHG emissions and sustainable communities. The organization is partially funded by government entities that pay an annual membership fee to access ICLEI's resources.

Climate Initiatives & Programs

ICLEI guides its local government members

through a five milestone performance-based methodology for reducing GHG emissions, enhancing community sustainability, and promoting economic development through region-appropriate energy conservation strategies. ICLEI's dynamic emissions analysis, action planning, and implementation tools and resources support these milestones.

The Five Milestones for Climate Mitigation:
Milestone 1: Conduct an Emissions Analysis
Milestone 2: Set an Emissions Reduction Target
Milestone 3: Develop a Local Climate Action Plan
Milestone 4: Implement Local Climate Action Plan
Milestone 5: Monitor and verify results.

ICLEI members receive access to a variety of climate related products and services. These include:

- ***Clean Air Climate Protection Software*** (CACP) emission inventory and management software for municipal governments.
- Tools, publications and other resources, including the **Green Building Decision Tool** and the **Calculator for Density VMT** (vehicle miles traveled). This calculator enables planners to compare the environmental impacts of residential developments of varying densities.
- Performance-based campaigns and initiatives.
- State, regional, national, and international peer networking.
- Technical, policy and communications expertise and assistance.
- Annual training and leadership events.

Institute for Local Governments

The Institute for Local Governments (ILG), formerly known as the Institute for Local Self Government, is the non-profit (501(c) (3)) research and educational affiliate of the California State Association of Governments and the League of California Cities. ILG has a long history of working with local governments, and recently celebrated its 50th anniversary in 2005.

[PULL QUOTE] *The Institute for Local Government's California Climate Action Network's Best Practices Framework provides an important, comprehensive list of suggestions for local government action to reduce GHG emissions…*

Climate Initiatives & Programs

The California Climate Action Network (CCAN) is the ILG program that helps cities and counties play a leadership role in addressing climate change. It serves as a clearinghouse of information that local governments can use for climate action programs. Resources made available include:

- ILG Climate Action Whitepapers provide an overview of selected issues, resources, and example related to climate change and sustainability
- ILG Climate Leadership Stories demonstrate the depth of local agency activities and can serve as an example that other agencies can follow and learn from.
- San Francisco Bay Area Climate Action Portal a comprehensive clearinghouse of information related to climate action in the Bay Area.
- Best practices and real world examples from cities and counties
- Funding opportunities and links to other resources
- Climate science and policy news and information.
- Meetings and conferences

CCAN's Best Practices Framework provides an important, comprehensive list of suggestions for local government action to reduce GHG emissions in the following Climate Leadership Opportunity Areas: (1) Energy Efficiency and Conservation, (2) Waste Reduction and Recycling, (3) Climate Friendly Purchasing, (4) Renewable Energy and Low-Carbon Fuels, (5) Land Use and Community Design (6) Efficient Transportation, (7) Green Building, (8) Water and Waste Water Systems, (9) Storing and Offsetting Carbon Emissions, and (10) Promoting Community and Individual Action.

Local Government Commission

The Local Government Commission (LGC) is a nonprofit, membership based organization that provides guidance, technical and policy assistance, and networking opportunities for its members. LGC's membership is composed of local elected officials, city and county staff, planners, architects, and community leaders.

The mission of LGC is to assist local governments in establishing and nurturing a healthier human and natural environment, a more sustainable economy, an actively engaged populace, and an equitable society. LGC helps its members achieve these goals by facilitating conferences, regional workshops, partnerships, and by providing an extensive resource library of related materials.

Climate Initiatives & Programs

The LGC focuses on climate change as one of four main issues along with community design, energy, and water. Climate change is addressed with a focus on land use, emphasizing the need for smarter growth. The 1991 Ahwahnee Principles for Resource-Efficient Communities form the basis of LGC's work on livable, sustainable communities. The principles provide a blueprint for elected officials to create compact, mixed-use, walkable, transit-oriented development in their communities. In addition to the Ahwahnee Principles for Resource-Efficient Communities, LGC also released Ahwahnee Principles for climate change, economic development, and water.

Some of the LGC's programs and resources include:

- Center for Livable Communities
- Center for Healthy Communities
- Implementing AB 32
- Energy Information Clearinghouse
- First Stop Shop for Water Resources
- Community Image Survey
- Village Home Tours

Local Government Sustainable Energy Coalition

(A program of the Local Government Commission)

The Local Government Sustainable Energy Coalition (LGSEC) is an association of California public entities formed to share information and resources to strengthen and leverage their communities' commitment to a sustainable energy future. The LGSEC is structured as an unincorporated association of local public entities. The coalition's core purpose is to decrease energy demand through energy efficiency, increase renewable energy production, and improve energy security and reliability, while improving the quality of life for their communities.

Climate Initiatives & Programs

Some of the LGSEC's most immediate priorities regarding climate change include the following:

- Establish Coalition priorities and represent Coalition interests in administrative proceedings before California state agencies such as the Public Utility Commission (CPUC), Air Resources Board, and others.
- Provide member entities and their representatives with technical and policy expertise on selected legislative proposals affecting local and regional energy interests.
- Enhance local government capabilities to integrate energy efficiency initiatives with demand response and the development of clean, efficient local energy supply options.

Sierra Club

The Sierra Club is one of the oldest and most well-known environmental advocacy organizations in the United States. Established in 1892 by John Muir, the organization continues to maintain one of the largest memberships and volunteer-based networks of any other environmental nonprofit in the nation. Within California, there are 13 active chapters, three of which are active in Southern California.

Climate Initiatives & Programs

Cool Counties: The Sierra Club supported Cool Counties Initiative seeks to marshal the resources of all 3,066 counties across the nation to address the challenges posed by climate change to the nation's communities. This initiative originated 2007 under the leadership of King County, Washington, Fairfax County, Virginia, and Nassau County, New York. Cool Counties pledge to reduce

their global warming emissions 80 percent by 2050, an achievable average annual reduction of 2 percent. Participating counties commit to four actions:

1. Reducing their own contributions to climate change through the implementation of actions addressing internal operations.

2. Demonstrating regional leadership to achieve climate stabilization and protect their communities.

3. Helping communities become climate resilient.

4. Urging national leadership to support the efforts

Cool Cities: A program that has gained tremendous momentum has been the Sierra Club's Cool Cities Program, which helps local community leaders encourage municipal governments to implement smart-energy solutions such as energy-efficient lighting, transportation, buildings, and municipal fleets. The program began in 1995 and is led by volunteers around the country, in collaboration with community members, organizations, businesses, and community leaders. Since 2005, over 1,000 city and county leaders have made a commitment to cut their community's carbon footprint.

Further, the Cool Cities website offers a variety of tools and information to help local governments address climate change, such as city profiles and climate action case studies, discussion forums for collaboration and communications, Cool Cities certification, best practice guides and technical information. While many cities use the website and its resources, it has been criticized for not offering the tools necessary for comprehensive climate action planning.

U.S. Conference of Mayors

The U.S. Conference of Mayors (USCM) is the official nonpartisan organization of cities with populations of 30,000 or more (there are 1,201 such cities in the country today). Each city is represented in the Conference by its chief elected official, the mayor.

In 2007, the U.S. Conference of Mayors launched a new program, the U.S. Conference of Mayors Climate Protection Center, in recognition of an increasingly urgent need to provide mayors with the guidance and assistance they need to lead their cities' efforts to reduce the GHG emissions that are linked to climate change.

Climate Initiatives & Programs

The Climate Protection Center
The Climate Protection Center provides city leaders with guidance and assistance to help them to push their cities to reduce the GHG emissions and reduce their climate impact. More specifically, the Center provides the following:

- Awards/recognition: Mayors' Climate Protection Award
- Best practices and examples of successful climate initiatives
- Resources and information on funding opportunities
- Legislation/policy updates
- Information on green summits
- Links to reports and surveys.

Conference of Mayors Climate Protection Agreement
Over 500 mayors have signed on to the Mayors Climate Protection Agreement, which commits them to take the following three actions:

1. Reduce GHG emissions in their cities to seven percent below 1990 levels by 2012.

2. Urge their state governments, and the federal government, to enact policies and programs to meet or beat the Kyoto Protocol's GHG reduction targets.

3. Urge the U.S. Congress to pass the bipartisan GHG reduction legislation, which would establish a national emission trading system.

Overview of Notable Organizations that Provide Tools, Resources and Support for Local Government Climate Action

This summary was created based on information posted on websites. It may not reflect all tools, resources, and support services provided by the entities.

Entity	Target User/ Audience	Provides GHG Calculator/ Inventory Software	Provides Resources for/ Encourages GHG Target Setting	Provides Best Practices and Other Resources	Provides Info. on Financial Resources	Provides TA	Provides Tools for Cost- Benefit or Co-Benefit Analysis of Climate Action Options
Climate Action Reserve	Early actors: corporate, non-profit, and gov't entities (due/fee paying).	Yes, through its program the California Climate Action Registry, but transitioning all inventory services to its sister organization, the Climate Registry.	Yes, but transitioning this function to the Climate Registry.	Protocols for quantifying carbon offset credits and project development.	No.	Yes with fees.	No.
Climate Registry	Leading corporate, non-profit, and gov't entities (due/fee paying).	Climate Registry Information System.	Yes.	GHG Reporting Protocols.	No.	Yes.	No.
California Air Resources Board/ Cool California. org	Individuals, small businesses, local gov'ts, youth, and schools.	Links to calculators offered by others. CARB also offers access to its "Local Government Operations Protocol," which is not a calculator but does provide the option for a 'free' method to estimate GHG emissions from municipal operations.	Encourages local gov'ts to reduce GHG emissions 15 percent below current levels by 2020.	Myriad of best practices, tool kits, and other resources for individuals, small businesses, local gov'ts, youth, and schools.	Yes, has a compre-hensive list of financial resources.	Yes but not the focus for the website.	Highlights specific no/low cost strategies but no cost benefit analysis tool. Does provide links to modeling tools such as I-PLACE³S, a scenario planning software designed to help regional and local governments see how development decisions affect both CO2 and criteria pollutants.
EPA	All local gov'ts	Does not provide a tool	No.	Limited resources for	No.	Yes/ limited.	EPA's COBRA and BenMap

	have access.	for calculating municipal emissions, but does provide GHG Inventory Capacity Building templates, an online tool for calculating personal emissions, and other helpful links.		local governments.		Can provide guidance to states and local gov't on preparing GHG inventories.	models can be used to analyze health benefits from criteria air pollution reductions but do not calculate changes in criteria pollutants associated with GHG mitigation strategies.
ICLEI	Cities, towns, and counties (due/fee paying).	Clean Air Climate Protection Software is an emissions management tool that calculates and tracks emissions and reductions of GHG gases and criteria air pollutants associated with electricity, fuel use, and waste disposal.	Members commit to a Five Milestone process that including setting inventorying emissions and then setting a reduction target.	Myriad of resources include success stories.	Not the focus.	Yes, for due paying mem-bers.	CACP calculates and tracks emissions of GHG gases and criteria air pollution. However, it does not allow the user to analyze the public health benefits from the air pollution reductions.
Institute for Local Gov't	Counties and cities.	Links to inventory tools provided by others. ILG did author Calculating Carbon Emissions whitepaper.	Not a focus.	Links to a wide variety of resources. Best Practices document lists Climate Leadership Opportunities.	Yes.	Third of funding comes from local gov't assoc. dues.	ILG encourages local governments to analyze co-benefits, but does not provide a tool to do so.
Local Government Commission	Community leaders.	Not emphasized.	Not a focus.	Myriad resources with a focus on creating healthy, active communities.	Yes, for members.	Yes, for mem-bers.	No.
Sierra Club: Cool Cities and Cool Counties	Cities and counties in collabor-ation with local leaders.	Not emphasized.	Not a focus.	Variety of resources including best practice guides.	Not emphasized.	Limited.	No.

U.S. Conference of Mayors	Leading mayors.	Not emphasized.	Mayors commit to reduce emissions in their cities to seven percent below 1990 levels by 2012.	Variety of resources including best practice guides.	Yes.	Limited.	No.

Gaps In Regional Climate Programs

Gaps among Climate Programs & Policies in the Region

Based on our landscape review of existing climate related activities in the region, we found numerous gaps in the region's climate action activities. The gaps may not only make existing activities insufficient for effectively addressing climate change, but might also potentially inhibit the development of a comprehensive regional effort on climate change.

Gap 1

The greater Los Angeles region lacks a comprehensive or coordinated approach to addressing climate change mitigation and adaptation.

One of the significant and most apparent gaps in climate action planning within the region is the lack of a regional climate action plan that assesses regional strategies as to how efficiently they reduce GHG emissions, and considers opportunities for coordinated adaptation strategies to increase the regions resiliency to the impacts of climate change. While SCAG's responsibilities under SB 375 will likely help develop a piece of this wider regional approach, its focus will be narrowly tailored to meeting the mandates of SB 375, and further, will likely not include some subregions that will choose to address SB375 mandates individually. Coordinated regional planning is essential for providing local governments guidance on how they should shape their local programs, and what types of GHG emission reduction targets are feasible/reasonable, and for identifying specific tools and models to assure consistency in measuring emissions and analyzing co-benefits.

Gap 2

The region needs a stronger connection to Federal and State level policy makers and legislators.

While there are many organizations trying to promote and foster climate action within the Los Angeles region, there currently remains no clear individual entity that represents Southern California's particular climate action interests and priorities at the state and federal levels. The reason for this gap in representation appears to be relatively simple: climate policy issues are still emerging, and tracking and understanding them requires a nuanced technical, scientific and political expertise. As it stands today, there appears to be no single entity in the region with the resources, experience, or expertise focused on climate change science and policy to adequately represent the region or effectively coordinate resources between entities.

On the federal level, where policy and legislation is still in a relatively early stage, there is a particularly timely need to establish an entity that will oversee and comment on federal rule-making and legislation and advocate for the regions interests and concerns. As the first chapter discussed, federal level climate legislation and policymaking is still in its formative stages, and thus there is an immediate need for some entity to take on this representative capacity. Similarly, on the state level, the Los Angeles region does not have a collective voice or representation to adequately assure the the consideration of the regions interests in the implementation of existing bills, or the adoption of new bills. Regional Landscape

Gap 3

Poor access to information on federal and state funding and grant opportunities.

In addition to the billions of dollars in stimulus funds being made available for renewable energy and energy efficiency projects, it is likely that revenue generated from a cap-and-trade climate program will also be directed to fund climate mitigation projects and programs around the nation. How this money will be dispersed is still unclear, although it can be expected that there will be a variety of opportunities for regional projects, where coordinated “collaborative” (e.g., multi-agency grants, grants for cross-jurisdictional projects) approaches could be important in designing the projects and funding requests. A region specific resource providing information on funding opportunities and opportunities for multi-

agency/jurisdictional participation would be useful in maximizing the regions ability to access these funds.

Gap 4

City interest and participation may depend on city size or affluence.

Meaningful participation in climate action requires the expenditure of staff time and other resources that may not be available to all cities in the region on an equal basis. A review of existing city programs tends to support this conclusion. Our review indicates that cities with robust action plans such as Los Angeles, Long Beach, Pasadena and Santa Monica, tend to represent either the largest of the regions cities, or the most affluent. Smaller and less affluent cities may be able to compensate for their lack of size and resources by seeking help from regional associations such as Councils of Government and from non-profit groups, however even these efforts can require a significant amount of staff time. Furthermore, some of the best programs, like ICLEI's, require a fee to participate. This means that small or lower income cities may not be getting the comprehensive resources they would need to engage in meaningful climate action.

Gap 5

This region lacks a central source of information on climate action resources and tools for local governments in the region.

While there are multiple organizations (e.g. CARB, ICLEI, LGC, etc.) that are taking on the important role of providing local governments, agencies, and industry with tools and resources for addressing climate change, no entity, public or private, is playing this role for specifically the Los Angeles region. Furthermore, because of the size and diversity of the region, as well as the multitude of entities involved in climate change, the tailored resources that do exist are dispersed and often difficult to find. Due to this, there appears to be a growing need for a comprehensive clearinghouse of climate planning information, news, and resources specific to the Los Angeles region. Such a clearinghouse could filter, compile, and highlight the most valuable climate action resources and tools available to the region.

Models for clearinghouses such as these already exist for other regions. In the Bay Area, the Institute for Local Government (ILG) hosts the "San Francisco Bay Area Climate Action Portal," which is a robust clearinghouse of information related to climate action in the Bay Area. This portal was created by ILG in partnership with the Bay Area Air Quality Management District. It provides a wealth of information such as examples of best practices in climate mitigation, a calendar or climate related events, climate related news, discussion forums, tools and resources for implementing climate and sustainability programs, etc.

Gap 6

This Region has no single commonly accepted resource/program for tracking emission reductions or developing and implementing a meaningful climate action plan.

Local governments lack a commonly accepted GHG measurement framework to assign responsibility for emissions. Different systems exist to help local governments inventory their emissions and then track their emission reductions. For example, ICLEI has a different GHG emission reporting tool than The Climate Registry, and both are being promoted for use in the region. Moreover, there is no one commonly accepted way for local government to initiate the development of their climate action programs. Some programs require that a local government do little more than pledge to reduce emissions, while others like ICLEI, offer a comprehensive 5-Milestone process that member local governments follow. Even with the most comprehensive programs, however, results can vary widely, in part because of the voluntary nature of the efforts.

Competing programs and resources cause confusion among local governments about their options, create a barrier to regional collaboration, and make comparisons between local actions challenging. Comparisons between local actions are important for research and accountability purposes. There is certainly no one regional climate action plan in the region and coordination of the individual local government plans would be challenging in part due to differences in the underlying systems/programs that cities have used to create and implement their climate action activities.

Gap 7

Local and regional entities are lacking important climate action evaluation tools and best practice resources.

While there already exists several important resources and tools available to local governments and climate planning entities in California, some important resources still remain undeveloped or inaccessible. Below are some of the resources we identified that would be useful for the region.

Tools unavailable for adequately evaluating the costs and benefits of climate action.

Our team was not able to identify any readily available modeling program or analysis tool that local governments can use to quantify the full extent of the co-benefits associated with different climate action strategies; public health was one area in particular that was not being integrated into modeling and analysis programs. ICLEI's Clean Air Climate Protection Software calculates and tracks emissions of GHG gases and criteria air pollution. However, it does not allow the user to analyze the health benefits from the air pollution reduction. The U.S. Environmental Protection Agency (EPA) offers two modeling software programs— the Co-Benefits Risk Assessment (COBRA) and the Environmental Benefits Mapping and Analysis Program (BenMap)— to quantify the public health benefits from improvements in air quality. Theoretically either of these programs could be used in conjunction with ICLEI's software to estimate public health benefits of climate actions. However, this is not currently being done.

Moreover, use of these resources requires staff with a background in modeling and an understanding of the resources available. The California Air Resources Board has conducted a co-benefit analysis of the climate policies recommended in the AB 32 Scoping Plan, but comprehensive co-benefit analysis is not occurring at the city level or in most regions, including the Los Angeles region.

No generally accepted region-specific analysis of best practices in climate action

Even with more evaluation tools and a commonly accepted GHG measurement framework, local governments may lack the knowledge and ability to identify successful emission reduction strategies. Although there exists multiple climate action "best practice" resources available to local governments, information on best practices tailored to the region remains limited. This is significant, since local geographic, cultural, and economic considerations are important in evaluating the value of the co-benefits to climate action programs, and can be important in helping local government quickly prioritize among various climate action strategies.

Gap 8

Limited coordination and collaboration exists between NGO's on research, resources, and other climate related programs.

While there are multiple non-governmental organizations actively working on climate issues within the region, there is a limited coordination between these organizations, often leading to missed opportunities for cooperation as well as inefficient duplication in efforts. There are many reasons for this. First, most organizations are relatively new to working on climate programs and issues, and although they are progressing quickly, they are still learning about the issues, tracking the science as it develops, and identifying their strongest niche in the area. Second, even amongst the organizations with experience working on climate change issues, efforts have historically focused on policies, programs, resources and research at the national and international levels, and less at the regional and local level. Finally, while various state, national, and international organizations are beginning to coordinate on policy and programs, these efforts have not trickled down to the local or regional level, partially because of the difficulty for these organizations to create broad programs that are flexible enough to have an impact in a diversity of local jurisdictions. The coalitions and initiatives—such as CoolCalifornia.org — highlighted in this report serve as examples of some exciting coordination, but more is needed, particularly at a regional level.

Recommendations

Recommendations for Advancing Climate Action in the region

Based on the findings above, the following section provides targeted recommendations to the Collaborative on potential strategies and activities that may help advance climate action planning and programs within the region. Pursuing all of the recommendations may not be necessary and they need not be done simultaneously. By undertaking a few at a time, we believe that the Collaborative can have a meaningful and positive impact on the region's ability to address climate change.

Recommendation 1

Identify an entity that can speak for the regions stakeholders before federal and state level climate policy makers

The Collaborative can play an important role in representing the particular interests and positions of Southern California governments among both state and federal policy makers. On the federal level, the Collaborative has the opportunity to play a substantial role in influencing policy and legislation at a relatively early stage, which is critical in assuring that the Los Angeles region is adequately considered at every stage of the legislative process. Alternatively, in the event that Congress establishes a federal regulatory system, there may be an ongoing need for the Collaborative to act as a conduit for transmitting compliance and implementation resources from federal agencies to regional and local entities.

On the state level, there is a similar need for regional representation and advocacy, and the Collaborative could play an important role in representing regional interests with state legislators and agencies. Key state-level bills such as AB 32 and SB 375 are still in the early stages of implementation, and efforts to represent the needs and experiences of the region during the formative stages of these bills have been disjointed, uncoordinated, and inconsistent. Furthermore, as new bills and regulations arise, the Collaborative can play an important role in building consensus within the region, and developing advocacy goals for the Collaborative to promote within state-level regulatory bodies as well as within the region.

Recommendation 2

Track and promote federal and state funding opportunities

As mentioned previously, one existing gap in climate action activities has to do with inadequate informational resources for local governments and agencies to learn more about potential funding opportunities for advancing climate adaptation and mitigation activities. In regards to federal funding opportunities, the Collaborative can play an important role regionally in three key ways:

(1) Identify emerging federal funding opportunities for climate adaptation and mitigation strategies, and advocate for Southern California's fair share of that funding;

(2) Identify existing funding opportunities, and disseminate information and resources for applying for the existing funding; and

(3) Work with local agencies and entities to promote collaborative and multi-agency funding applications. Key sources of potential funding opportunities include the federal stimulus funds, funding strategies proposed under the varying federal cap-and-trade legislation, Pop 84 grants administered by California's Strategic Growth Council, and Measure R funds.

Recommendation 3

Develop a clearinghouse of climate planning information for the region

The Collaborative is in a prime position to implement a clearinghouse dedicated to providing local governments and agencies with resources and information related to climate action planning and sustainability. Although it is not a complete representation, the "San Francisco Bay Area Climate Action Portal" can provide a basic model for the types of resources that would be useful for the region. The Collaborative could lead the Greater Los Angeles portal or work in partnership with SCAQMD

and/or other entities, just as the Bay Area Air Quality Management District and the Local Government Commission partnered to create the San Francisco Bay Area Climate Action Portal.

In addition, other partnership opportunities may involve local academic institutions that are playing a role in supporting climate action planning in the Los Angeles region. For example, the UCLA Program on Local Government Climate Action Policies is working to identify and support research that will enable local governments to reduce GHG emissions and adapt to climate change. The Program also aims to translate that research into a useful form for individuals who are leading and working within local governments. Other possible partners might include the SCAG or another local government association.

Recommendation 4

Identify best practices in climate action planning to help coordinate local governments within the region

One area the Collaborative could play an important role in advancing regional climate mitigation programs is by developing a regional "best practices" resource, that will help local governments prioritize certain strategies over others. The emphasis of this document should focus on mitigation measures and GHG emission reductions. A regional best practices analysis would benefit the region in three ways. First, it could accurately identify the "low-hanging fruit" and other climate action strategies that also result in valuable economic savings or public health benefits. Second, during these early stages of SB 375 and AB 32 implementation, a regionally focused best practice resource could help local governments prioritize strategies collectively, which may promote coordination and cooperation. Finally, a regional best practices resource would help to establish a baseline of action to assist in evaluating the comprehensiveness of climate action programs by local entities. The Collaborative could partner with organizations such as ILG that have model best practice documents and perhaps tailor an existing resource for the Los Angeles region.

Recommendation 5

Develop a regional climate action plan (mitigation and adaptation)

By working with the County of Los Angeles, in coordination with other potential regional partners such as SCAG, the SCAQMD, or MTA, the Collaborative could guide the development of a regional Climate Action Plan that would harmonize various regional efforts (e.g. SCAG's Sustainable Cities Strategy, Los Angeles County's Climate Initiatives, and the (City of Los Angeles' GREEN LA Program) and create a regional emissions reduction target that could also inform emerging local programs.

To be comprehensive, the Plan must include three main components. First, the Plan must establish a mechanism for creating a regional GHG emissions inventory and for tracking and measuring the region's carbon footprint. An initial inventory is necessary for establishing benchmarks, tracking subsequent progress and monitoring results. Second, the Plan should lay out a comprehensive strategy for reducing emissions to a specified level over a specified period of time. This emissions reduction strategy could provide guidance to cities within the region on how to model local mitigation strategies and programs. Finally, the Plan should consider which adaptation measures may be necessary to better prepare the region for potential climate related impacts on regional infrastructure.

Recommendation 6

Promote and commission research on regional climate mitigation and adaptation strategies

Additional research is needed to help local governments in the Los Angeles region to fully comprehend the impacts of climate change for their jurisdiction. By working with local universities or even universities abroad, the Collaborative could help develop scenarios for the potential impacts of climate change on water supply, water use, energy, land use, public health, etc. This type of research could help guide important decisions about regional development. With this information, the Collaborative could also propose climate adaptation strategies tailored to specific jurisdictions.

Recommendation 7

SCAG and SB 375 Implementation

To date, SB 375 implementation remains in the early stages of development, and the Collaborative

could act as an important resource and partner to SCAG, the Subregions and local governments in multiple areas. Some of the ways the Collaborative could be helpful include:

- Working with SCAG to develop Regional and Subregional Best Practices for climate action planning, and holding workshops/briefings to educate local officials about these best practices and the co-benefits of smart growth.

- Encouraging "stretch goals" for communities to reduce GHG emissions from land use and transportation.

- Fostering collaboration and consensus building between jurisdictions and SCAG subregions with regard to SB 375 implementation and other regional smart growth strategies.

- Developing SB 375 implementation and tracking tools, and/or compiling important resources, software, or other guidelines to aid in SB 375 implementation. Specifically, the Collaborative could promote the development and use of planning models that can accurately estimate the potential global warming and public health impacts of various land use scenarios. The cutting-edge work of the I-PLACE3S model in King County, Washington serves as an example of a tool that can incorporate public health, air quality and climate change factors into existing parcel-specific models. For information about I-PLACE3S in California, visit: http://www.energy.ca.gov/places/

Recommendation 8

Host an annual summit on regional climate action initiatives and sustainability

As more local governments around the region begin to increase their efforts to establish climate action programs that meet or exceed emerging mandates, city officials would greatly benefit from the opportunity to meet with other local government officials that are engaged in similar efforts. A local summit focused on regional climate action and sustainability initiatives would provide local officials and NGO's with the opportunity to network, discuss opportunities to collaborate, and share important information about funding opportunities and best practices. The summit could be sponsored by the Collaborative alone, or with partner organizations.

Recommendation 9

Coordinate a regional outreach and communications effort to encourage inclusive participation among the diverse communities in the region.

Many individuals and organizations within the region, although stakeholders in many of the climate related programs discussed above, are still unfamiliar with (1) what's happening in their communities on climate, (2) what they can do locally to advance climate action programs and energy efficiency, and (3) how their community fits into the state and regional programs already under way. Reaching out to these potential stakeholders would not only help spawn more local and community participation in the regional process, but would help build a regional consensus and commitment to address climate change with a strong and comprehensive approach.

Conclusion

This inventory of climate programs and initiatives relating to the Los Angeles region is the first of its kind, and clearly demonstrates that a tremendous amount of activity is taking place. Regional groups, cities and non-governmental organizations are involved in a myriad of efforts that indicate significant interest in climate action and a willingness to expend considerable resources on this issue. At the same time, our inventory also reveals that the interest level and amount of activity is not level among all cities in the region. Some cities have established very sophisticated and advanced climate action programs, while others have yet to get started. Our inventory also shows that there is relatively little regional coordination or cohesion as compared to the Bay Area, the other region of California that is most similar to ours in terms of population, numbers of cities and complexity of governmental organizations.

Because of the disparity in activity among cities in the region and because we found relatively little regional coordination, a number of significant gaps are apparent. For example, the cities in the region do not speak in one voice in their conversations with the state or federal governments. Overall, we identified multiple gaps that, if filled, may improve the overall quality of climate action programs among the cities in the region.

All the gaps we identified are considerable in scope, complexity or political sensitivity. Yet, we believe that all the gaps can be addressed. We also noted a variety of recommendations that may help address these gaps. All of the recommendations may not be necessary and they do not need to all take place at the same time. By undertaking a few at a time, we believe that the Collaborative can have a meaningful and positive impact on the region's ability to manage climate change. With timely action, we believe that the next inventory of climate action activity in the region will demonstrate improvements from the current situation.

References & Resources

(In order of appearance in report)

PPIC Statewide Survey: Californians and the Environment
http://www.ppic.org/main/publication.asp?i=906

Federal Government

The American Clean Energy And Security Act of 2009 (ACES)
http://www.opencongress.org/bill/111-h2454/show

The Clean Energy Jobs and American Power Act of 2009 (S. 1733)
http://www.opencongress.org/bill/111-s1733/show

Environmental Protection Agency (EPA
http://www.epa.gov/climatechange/anpr.html

National Highway Traffic Safety Administration (NHTSA)
http://www.nhtsa.dot.gov/portal/fueleconomy.jsp

State Government

AB 32, Global Warming Solutions Act (AB 32)
http://www.arb.ca.gov/cc/ab32/ab32.htm

SB 375, Sustainable Communities (SB 375)
http://info.sen.ca.gov/pub/07-08/bill/sen/sb_0351-0400/sb_375_cfa_20080818_153416_asm_comm.html

Proposition 84 (Prop 84)
http://baydeltaoffice.water.ca.gov/sdb/prop84/index_prop84.cfm

The California Environmental Quality Act (CEQA)
http://ceres.ca.gov/ceqa/

California's Office of the Governor
http://gov.ca.gov/

California Air Resources Board (CARB)
http://www.arb.ca.gov/homepage.htm

California Climate Action Team
http://www.climatechange.ca.gov/climate_action_team/index.html

Strategic Growth Council
http://www.sgc.ca.gov/

Office of Planning & Research (OPR)
http://www.opr.ca.gov/

Natural Resources Agency
http://resources.ca.gov/

Business Transportation and Housing Agency (BTHA)
http://www.bth.ca.gov/

California Building Standards Commission (BSC)
http://www.bsc.ca.gov/default.htm

Department of Food & Agriculture
http://www.cdfa.ca.gov/

Office of the Attorney General
http://ag.ca.gov/

State Lands Commission
http://www.slc.ca.gov/

California Public Utilities Commission (PUC)
http://www.slc.ca.gov/

Office of the Treasurer
http://www.treasurer.ca.gov/

Greater Los Angeles

South Coast Air Quality Management District (SCAQMD)
http://www.aqmd.gov/

Southern California Association of Government (SCAG)
http://www.scag.ca.gov/

Los Angeles County
www.lacounty.gov

Southern California Public Power Authority (SCPPA)
http://www.scppa.org/

Metropolitan Transit Agency (Metro)
http://www.metro.net

Southern California Edison (SCE)
http://www.sce.com/

Metropolitan Water District of Southern California (MWD)
http://www.mwdh2o.com/

Southern California Gas (SoCal Gas)
http://www.socalgas.com/index/

Cities & Local Entities

City of Los Angeles
http://www.lacity.org

Community Redevelopment Agency (CRA)
http://www.crala.org/

Los Angeles World Airports (LAWA)
http://www.lawa.org/

Port of Los Angeles
http://www.portoflosangeles.org/

Los Angeles Department of Water & Power (LADWP)
http://www.ladwp.com

City of Pasadena
http://www.ci.pasadena.ca.us/

City of Santa Monica
http://www.smgov.net/

City of Long Beach
http://www.longbeach.gov/

City of Manhattan Beach
http://www.ci.manhattan-beach.ca.us/

Non-Governmental Organizations & Non-Profits

Apollo Alliance
http://apolloalliance.org/

ClimatePlan
http://www.climateplanca.org/

Global Warming Action Coalition (GWAC)
http://www.solutionsforglobalwarming.org

Green LA Coalition (Green LA)
http://www.greenlacoalition.org/

The Climate Action Reserve
http://www.climateactionreserve.org/

The Climate Registry
http://www.theclimateregistry.org/

CoolCalifornia.org
http://www.coolcalifornia.org/

ICLEI USA: Local Governments for Sustainability (ICLEI)
http://www.icleiusa.org/

Institute for Local Governments (ILG)
http://www.ca-ilg.org/

Local Government Commission (LGC)
http://www.lgc.org/

Local Government Sustainability Coalition
http://www.lgc.org/lgsec

Sierra Club
http://www.sierraclub.org/

U.S. Conference of Mayors
http://usmayors.org/

About The Los Angeles Regional Collaborative For Climate Action & Sustainability

The Los Angeles Regional Collaborative for Climate Action & Sustainability was designed to encourage greater coordination and cooperation at the local and regional levels. The Collaborative represents a network of leadership from government, the business community, academia, labor, and environmental and community groups. The purpose of this collaboration is to share information, foster partnerships, and develop system wide strategies to address climate change and promote a green economy through sustainable communities.

Collaborative Objectives

- Build a regional action plan to 1) establish baselines of current GHG emission levels, 2) identify GHG emission reduction targets and mandates, 3) develop a mechanism for tracking progress in reducing those emissions, and 4) provide strategies to help meet those goals.
- Proactively create cross-jurisdictional and public-private partnerships in support of the regional action plan development and implementation.
- Work together to leverage local, state and federal resources to implement the regional action plan.
- Share information and best practices on climate change and other sustainability goals.
- Develop a consistent communication plan for informing stakeholders of the Los Angeles region of the urgency in addressing global climate change and reducing GHG emissions.

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ALA worked with a team of consultants and experts in building this report. (In alphabetical order by first name)

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